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UTAH STATE OFFICE HAZARDOUS SUBSTANCES CONTINGENCY PLAN

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UTAH BLM

HAZARDOUS SUBSTANCES

CONTINGENCY PLAN

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RECOMMENDED BY: **DATE:** 6/9/92
DSD RESOURCES

APPROVED BY: **DATE:** 6/12/92
STATE DIRECTOR

UTAH BLM
HAZARDOUS SUBSTANCES CONTINGENCY PLAN

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INTRODUCTION

This document is the Utah BLM hazardous substances release contingency plan or what to do when hazardous substances are discovered on public lands.

What is a hazardous substance? As defined by section 101(14) of CERCLA, any substance designated pursuant to section 311(b)(2)(A) of the Clean Water Act (CWA); any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress); any toxic pollutant listed under section 307(a) of the CWA; any hazardous air pollutant listed under section 112 of the Clean Air Act; and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act. The term does not include petroleum including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas.)

What is a hazardous substance release? A release (also referred to as an incident) as defined by section 101(22) of CERCLA, means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant). For the purposes of this contingency plan, release also means threat of release.

How is a hazardous substance release discovered? 1. By BLM employees. 2. When a citizen calls and reports possible hazardous substances on public land. 3. When a local or State agency informs BLM they have discovered possible hazardous substances on public land. 4. When the person responsible for the release or spill notifies the BLM.

What to do when a hazardous substance release or spill is discovered? This depends on the type of situation. This plan covers three types of response categories: emergency, time-critical, and non-time-critical. You should review this plan and keep it handy so you will know what to do in case you discover or have reported to you a hazardous substance release. **Most of all you need to pay close attention to the hazardous substances safety procedures in Chapter 2.**

When is an emergency response required? This level of response is required when the release or the threat of release requires on-site activities be initiated within hours of the determination that a release has occurred. It is an emergency if: the substance is leaking or has spilled from its container; or even if it is not leaking, it is in a location where the public or other employees may come in contact with it and it has been definitely identified as a hazardous substance or it is unlabeled and you do not know what it is; and it is an imminent threat to public health and safety or it is a significant threat to natural resources.

Examples are: a release occurring in high-use recreation areas or areas adjacent to developed residential areas or other heavy use areas involving public lands, where the likelihood of exposure to the public is high; a release occurring in areas of critical habitat, e.g., threatened and endangered species habitat; or a barrel leaking into a stream.

When is a time-critical response required? This type of response occurs when a removal action is appropriate and necessary and less than 6 months is available before on-site activities must be initiated. Unlike emergency responses, time is usually available for site evaluation and clean-up strategy consideration. Traditional procurement methods for contracting or requesting services can be utilized. These releases generally involve spills and illegal dumping of hazardous substances on public land where there is not an immediate danger or threat to public health and safety or to critical resources, but the removal still needs to occur within a timely fashion to prevent an emergency from occurring.

When is a non-time-critical response required? This is when a determination has been made that a removal action is appropriate and necessary, and more than 6 months is available before on-site activities must begin. Examples of this level of response include sites where the use or disposal of hazardous waste or substances has been historic, on-going, or currently abandoned such as legal and illegal dumps; sites where BLM has issued past use authorizations for disposing of hazardous waste or substances; or sites requiring cleanup of hazardous wastes that have abatement, liability, and financial complexities where there is not an immediate danger or threat to public health or safety or critical resources.

What to do when hazardous substances are discovered on private or other agency lands. Bureau employees have a responsibility to report any find of hazardous substances regardless of land ownership. However, the reporting procedures are somewhat different for other land ownerships (see Chapter 3).

What are the responsibilities of BLM and its employees in a hazardous substance release? Actions by Bureau employees on hazardous substance matters are limited to reporting, site security, and coordination of actions.

Note: Remember it is BLM policy that under no circumstances will BLM personnel or capital equipment be used for hazardous waste site or release investigation, control, or clean up (see Appendix 1). Only limited exceptions apply to this policy as explained in the appendix.

The Environmental Protection Agency (EPA) has the overall responsibility to ensure that all hazardous substances releases are properly and adequately abated on Federal lands. EPA and the State of Utah Department of Environmental Quality will provide technical assistance. BLM's role is to ensure that the site is cleaned up.

If there is no identifiable responsible party or the PRP refuses to take action, then BLM will take those actions necessary to affect a clean up. These actions are to include limiting access to the site to insure safety of both Bureau personnel and the public and contracting for the actual cleanup/removal of the materials. Investigations will take precedent over other actions only when there is no imminent threat for public health and safety. If during the course of the investigation a threat is identified, a request should be made to the State Director to either defer or terminate the investigation. At no time will BLM personnel remove or transport any hazardous waste or unknown material.

CHAPTER 1

PURPOSE, AUTHORITY, DELEGATIONS, AND RESPONSIBILITIES

Purpose of Plan:

1. To provide BLM Utah's procedures necessary to affect compliance with existing State and Federal laws for protection of employee and public health and the environment in the case of a hazardous substance release or threat of a release of hazardous substances.

2. To provide instructions on required telephone notification (legal and administrative) procedures to be followed in the case of a hazardous substance release or discovery.

3. To provide instructions on written reports that are required to be submitted after telephone notification of a hazardous substance release or discovery.

4. To provide initial guidance and references for hazardous substances sampling, analysis, cleanup, transport, and disposal.

5. To provide instructions on protecting BLM employees and the public from hazardous substance releases and discovery.

This plan provides each office with the tools necessary to respond to an incident resulting from the release or threat of a release of hazardous substances into the environment or to initiate action on a newly discovered site containing potentially hazardous substances.

Authority:

1. Federal Water Pollution Control Act as amended by the Clean Water Act of 1977.

2. Resource Conservation and recovery Act (RCRA) 1976.

3. Clean Air Act as amended 1977.

4. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and as amended by the superfund amendments and Reauthorization Act (SARA) of 1986.

5. National Contingency Plan (40 CFR 300)-requires national procedures for responses to spills of oil and releases of hazardous substances.

6. Executive Order 12088-Federal Compliance with Pollution Control Standards.

7. Federal Land Policy and Management Act (FLPMA) of 1976.

Delegations:

1. The District Manager is delegated the authority to obtain the EPA ID number for shipment of hazardous waste to a Treatment, Storage, and Disposal Facility (TSDF). A separate number is required for each release site.

2. The District Manager is delegated the authority to sign the waste manifest which has to accompany each shipment to a TSDF.

3. The District Manager is delegated the authority to make all of the legally required contacts and to initiate the administrative contacts.

4. The District Manager is delegated the authority to make the necessary notifications for hazardous substance releases or discovery on private or other agency lands.

Responsibilities:

1. The District Manager for ensuring the preparation of a District contingency plan, to meet District requirements and needs to effectively and efficiently respond to emergency, time-critical, and non-time-critical response actions, as a supplement to this State contingency plan. The District supplement will include predeterminations and will be updated, as a minimal, on an annual basis.

2. The Hazardous Material Coordinator for tracking the copies of the State and District contingency plans distributed within the District, and ensuring that these copies are kept updated as revised pages and chapters are issued.

3. The Hazardous Material Coordinator for handling all hazardous substance releases and oil spills. See Appendix 2 for oil spill reportable quantities. Even though much of what the oil and gas industry does is exempt under RCRA, when a release occurs (see Introduction section page I-1 for definition of release) it becomes a CERCLA and a hazardous material problem.

4. The Hazardous Material Coordinator for maintaining close coordination with law enforcement (see Chapter 7) and minerals personnel as determined by the type of release or spill.

CHAPTER 2

HAZARDOUS SUBSTANCES SAFETY PROCEDURES

Any BLM personnel discovering any containers, spills, etc. suspected of being hazardous substances are to follow the four Rs:
1. RETREAT; 2. RECOGNIZE; 3. REPORT; and 4. RESTRICT.

RETREAT

1. Be aware. Move a safe distance from the site.
2. Stay up wind.
3. Stay out of low areas.
4. Turn off vehicle air conditioning.
5. Use binoculars if available to gather site data, i.e., types and number of containers, numbers or other identifying labels, dead animals, etc.
6. Resist the urge to take samples or help in the cleanup.

RECOGNIZE

1. Note foul smells, dead animals, dead vegetation, etc.
2. Take pictures if camera is available (MAINTAIN SAFE DISTANCE).
3. Observe any labels on containers that might indicate contents or ownership.

REPORT

1. Notify appropriate personnel using procedures described in Chapter 3 of this plan.
2. Document what you do and see and begin the initial Hazardous Substances Site report (see appendix 5).

RESTRICT

1. Secure the area if needed and restrict public access.

DO NOT DO THE FOLLOWING

1. Get near the containers, spilled substances, etc.
2. Breath fumes.
3. Smoke.
4. Touch or taste spilled materials.
5. Open or move the containers.
6. Eat or drink while in the contaminated area.

Hazardous substances may be toxic, flammable, explosive, or corrosive. They may be in drums, cylinders, canisters, sacks, or uncontained such as piles of solids, pools of liquids, abandoned tailings ponds, or clouds of gases.

How does one recognize a hazardous substance site? Of course a tanker spill or a train wreck with placarded cars is easy to recognize. But what about those other situations which one finds on public lands. Table 1 provides some danger signs that you should be aware of.

BLM employees are not to participate in the handling of hazardous substances for purposes of site investigation, clean up, or response activities without the written approval of the State Director (see Appendix 1). This approval will only be considered in special circumstances where an employee is required to enter on site to adequately perform their job. All OSHA requirements will have to be met before entry is allowed. Normally, all work involving direct contact with hazardous substances will be contracted with experienced professionals in the field.

Additionally, BLM personnel shall not allow the use of BLM capital equipment in the handling of hazardous substances, except by the direct written order of a Federally designated on-scene coordinator (OSC) in an emergency response situation. When equipment is borrowed under such circumstances, the BLM must not accept return of the equipment prior to certification of complete decontamination by the borrowing agency.

Despite remaining alert to your surroundings and following all safety precautions, you or someone else may become contaminated. The following are suggested procedures to be followed.

The first and hardest to accomplish is that you should not put yourself at risk of contamination to rescue someone who has been contaminated. By putting yourself at risk, often all you will accomplish is making a bad situation worse by becoming contaminated yourself. Call for professional help from the emergency responders who have the proper equipment and know how to handle hazardous substance situations.

When calling for emergency services make sure that you identify that hazardous substances are involved and what they are if possible. Do not let others become involved without knowing what they are facing.

Unaccompanied Employee: Contact the District Office if at all possible for guidance. If suffering from any effects due to contamination, seek medical assistance immediately. Call for emergency assistance if possible. If this is not possible, drive to the nearest medical facility for aid, **but remember to alert them when you arrive that you are contaminated; do not walk in, contaminating facilities and other people.** If you must drive, do so with the windows down to avoid breathing excess toxic/hazardous fumes. Do not operate a motor vehicle with the windows up and the heater on. Do not rely on air conditioning to provide adequate ventilation.

TABLE 1

DANGER SIGNS FOR CONTAMINATED SITES

1. PRESENCE OF DRUMS, BAGS, SACKS, ETC.
2. UNUSUAL SMELLS
3. PRESENCE OF DEAD OR SICK ANIMALS, STRESSED VEGETATION OR UNUSUAL LACK THEREOF
4. UNUSUAL COLORATION OR DISCOLORATION OF THE LAND SURFACE
5. FRESH DISPOSAL OF OILY WASTES
6. UNAUTHORIZED DISPOSAL OF ANY LIQUID WASTES AT A LANDFILL
7. SHORTNESS OF BREATH
8. METALLIC OR UNUSUAL TASTE IN MOUTH
9. BURNING EYES
10. ITCHY NOSE
11. TINGLING OR BURNING SKIN
12. SUDDEN APPEARANCE OF RASHES OR BLISTERS
13. DIZZINESS
14. HEADACHE
15. NAUSEA
16. MUSCLE WEAKENING
17. SALIVATION
18. YOUR BOOTS BEGIN TO DISSOLVE!

Accompanied Employee: Immediately contact the District Office for help if at all possible. Call for emergency assistance if possible, or as a last resort transport the employee to the nearest medical facility. Remember, warn the facility of contamination. Transport the employee in a well ventilated vehicle. For example, if using a pickup, place the employee in the bed of the pickup to avoid contaminating other personnel.

Note: Any vehicle used to transport a contaminated person is to be considered contaminated as well. Proper decontamination of the vehicle is required before it can be put back in service.

DON'T - be a hero. Seek help for others. If you yourself become contaminated remember, effects may not take place immediately.

DON'T - contaminate equipment or vehicles and fail to advise the office.

DON'T - come back to the office or your home with contaminated clothing on.

DO - remain aware of your surroundings and follow all safety precautions to avoid contamination.

DO - attempt to seek guidance from the District Hazardous Materials Coordinator and Safety Coordinator if you become contaminated. District Office Safety Coordinator must contact the State Office Safety Officer in any contamination incident.

DO - seek medical attention if you feel ANY effects from the contamination. The District contingency plan shall identify these facilities.

DO - seek professional emergency services help in decontamination procedures. The District contingency plan shall identify those facilities which can provide this assistance.

DO - use common sense.

DO - submit an incident report regardless of how slight the contamination may be.

CHAPTER 3

NOTIFICATION AND REPORTING PROCEDURES

This chapter deals with the notification and reporting procedures required when a release of hazardous waste or substance occurs on public lands in Utah. Remember, a release is defined as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment."

The notification process has been subdivided into two parts: 1. legally required notifications, and 2. administrative (early alert) notifications. The District Manager or his identified staff has the delegated authority and requirement to make all the legally required notifications and to initiate the administrative notifications.

Prior to initiating the notification process, to the extent possible, verify that the release has occurred, (with the person making the initial report) that it is equal to or exceeds reportable quantities (see Appendix 2), and that it is on or is threatening public land resources.

There are three types of response actions (see introduction) that BLM personnel must be aware of and make appropriate notifications and reports: 1. emergency, 2. time-critical, and 3. non-time-critical. Figure 3-1, Hazardous Substance Release Discovery Flow Steps, shows the general steps required in any type of response.

Notification of a release of a hazardous substance or oil discharge in an amount equal to or greater than the reportable quantity (Appendix 2) must be made immediately to the National Response Center (NRC). It is also mandatory that a release involving a critical chemical substance (list under SARA Title 3) be reported to the Local Emergency Planning Coordinator (LEPC) (Appendix 3). The NRC is an information gathering center, as well as a source of information and assistance regarding the release. They can assist you with determining what kind of a hazardous substance situation you have or do not have and how to handle it. Do not hesitate to contact them (if the District HMM coordinator or backup is not available) regarding any suspected hazardous release situation. There is no penalty for reporting a suspected hazardous release problem that does not, in reality, exist. There can be a severe penalty for failing to report a suspected problem which subsequently develops into a hazardous release incident.

Figure 3 - 1

HAZARDOUS SUBSTANCE RELEASE
FLOW CHART

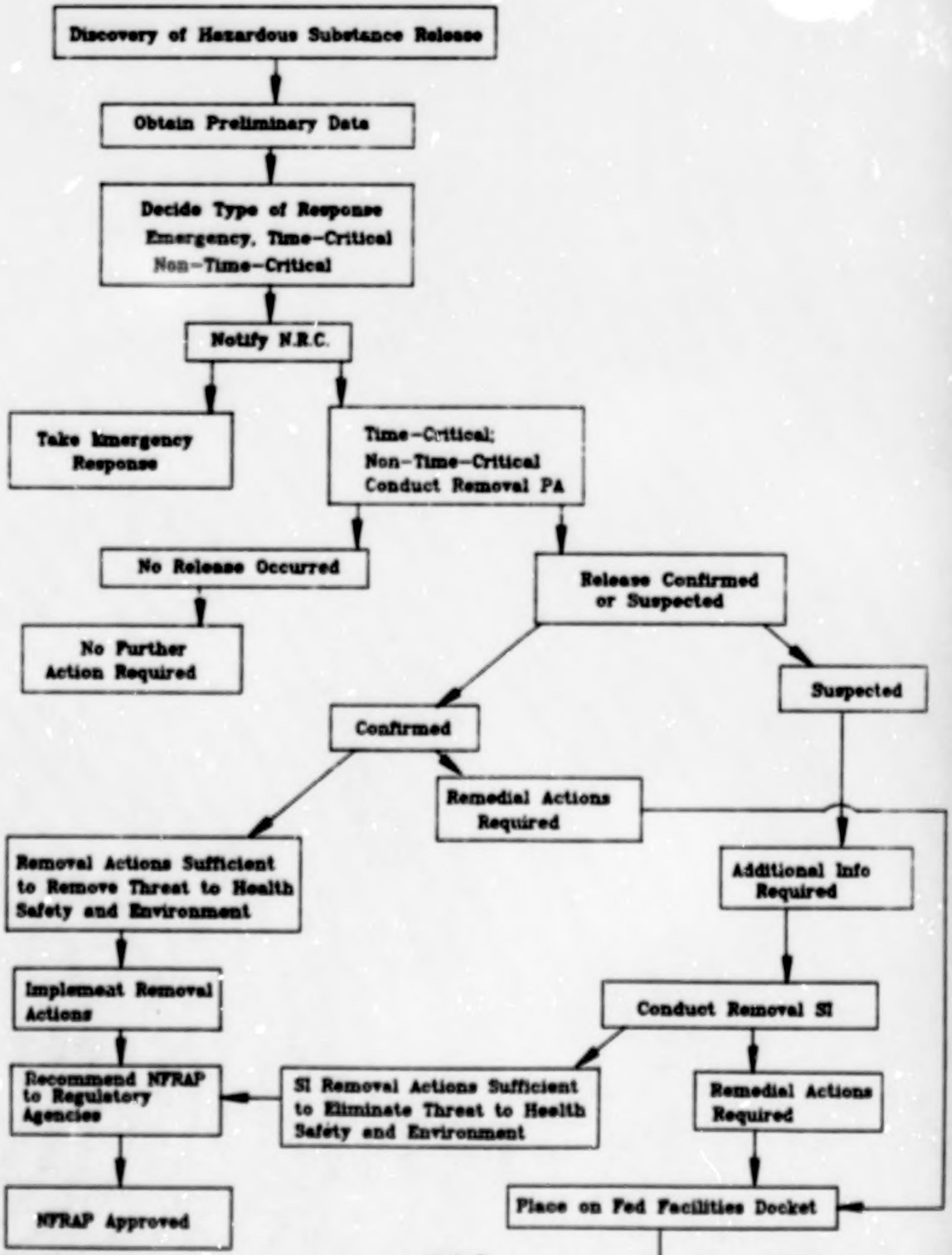
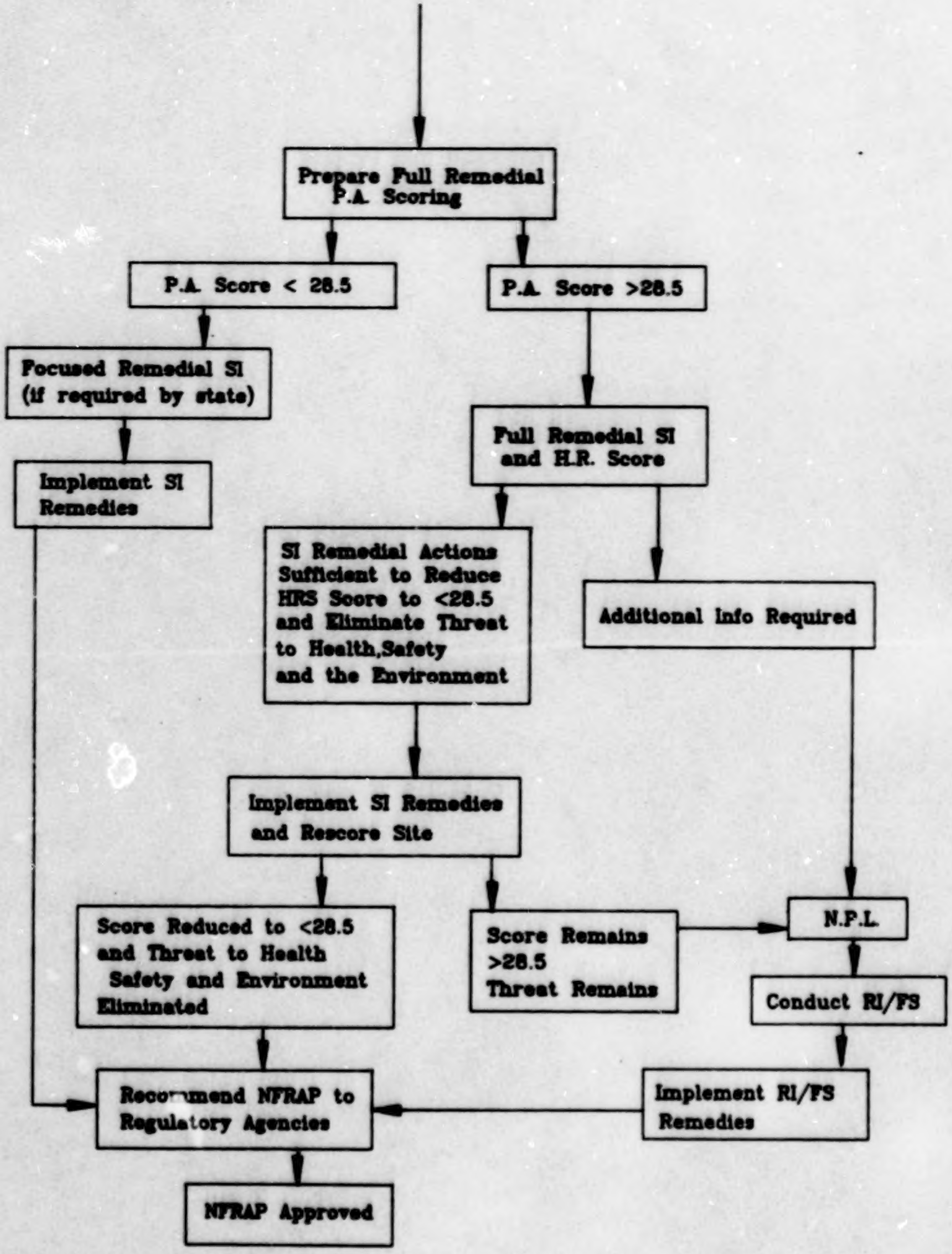

Discovery of Hazardous Substance Release
Obtain Preliminary Data
Decide Type of Response
Emergency, Time-Critical
Non-Time-Critical
Notify N.R.C.
Take Emergency Response
Time-Critical;
Non-Time-Critical
Conduct Removal PA
No Release Occurred
No Further Action Required
Release Confirmed or Suspected
Confirmed
Suspected
Remedial Actions Required
Removal Actions Sufficient to Remove Threat to Health Safety and Environment
Additional Info Required
Implement Removal Actions
Conduct Removal SI
Recommend NFRAP to Regulatory Agencies
SI Removal Actions Sufficient to Eliminate Threat to Health Safety and Environment
Remedial Actions Required
NFRAP Approved
Place on Fed Facilities Docket

Figure 3-1 (Continued)


Prepare Full Remedial P.A. Scoring
P.A. Score < 28.5
P.A. Score >28.5
Focused Remedial SI (if required by state)
Full Remedial SI and H.R. Score
Implement SI Remedies
SI Remedial Actions Sufficient to Reduce HRS Score to <28.5 and Eliminate Threat to Health,Safety and the Environment
Additional Info Required
Implement SI Remedies and Rescore Site
Score Reduced to <28.5 and Threat to Health Safety and Environment Eliminated
Score Remains >28.5 Threat Remains
N.P.L.
Conduct RI/FS
Recommend NFRAP to Regulatory Agencies
Implement RI/FS Remedies
NFRAP Approved

Bureau employees are legally responsible to report all releases of a hazardous substance or oil discharge in an amount equal to or greater than the reportable quantity, regardless of land ownership. However, reporting of spills or releases on private or other agency ownership could result in duplicate reporting and confusion. Therefore, an effort has to be made to immediately contact the landowner or head of the responsible agency to determine if they are aware of the release and have made the necessary reports. This contact should be verbal as well as followed up in writing. In the case of an emergency situation, if contact cannot be made, then we should initiate the required notifications. In the case of private land, the first contact should be with the State Department of Environmental Quality, Division of Environmental Response and Remediation, requesting that they handle the remaining required notifications. It is essential that a file be initiated and maintained on these type of situations.

To aid in this notification of other agencies, each District is to include in their contingency plan a listing of the agencies and contact points.

To facilitate and coordinate Federal agency contingency planning and emergency response activities, the National Contingency Plan (NCP) established a national response system which includes Regional Response Teams (RRTs). The RRT in Federal Region VIII includes a representative from EPA, U.S. Coast Guard, Forest Service, DOD/Army, Air Force, Corps of Engineers, Dept. of Energy, Dept. of Interior, Dept. of Health and Human Services, Dept. of Justice, Dept. of Labor/Office of Safety and Health, Federal Emergency Management Agency, Dept. of Transportation, Nuclear Regulatory Commission, each State in Region VIII (North Dakota, South Dakota, Montana, Wyoming, Colorado, and Utah), and the Navajo Nation. Although the primary function of the RRT is to provide backup and support (actual resources and/or expertise) to the Federal on-scene coordinator, one or more of the RRT agencies may be able to provide assistance directly to BLM in an emergency response. The RRT as a unit, as well as individual RRT agencies, can be contacted through DOI's Regional Environmental Officer at FTS 303-236-6900. Types of assistance/information RRT agencies can provide is detailed in Appendix 4.

NOTE: A written report, see Appendix 5 and 8, is required for all hazardous substances release (including oil spills) notifications that BLM receives, regardless of whether the release is reported to NRC or not, or if the release or spill is on public land. BLMs actions in response to any release reported to BLM, have to be documented and a file established.

A detailed (exact dates, times, people talked to, etc.) chronological narrative is required for every release/spill reported to BLM regardless of its final outcome. This is in addition to the report forms contained in Appendix 5 and 8.

A. Emergency Response

Prior to initiating the notification process, to the extent possible, verify that the release has occurred, (with the person making the initial notification) that it is equal to or exceeds reportable quantities (see Appendix 2), and that it is on or is threatening public land resources.

In these incidents immediate notification must be made. Either as a witness or receiving information from someone else, obtain as much of the following data as possible: (If unable to provide any item or if the information is unsubstantiated, say so!)

An initial report form has been developed (Appendix 5) for use in gathering this data and in making the required official notifications. A copy of this completed report is to be faxed (801-539-4074) to the State Office Hazardous Material Specialist within 48 hours of the discovery or report of an emergency response incident.

NOTE: **IF CLANDESTINE OPERATION (DRUG LAB) IS SUSPECTED, NOTIFY LOCAL BLM OR STATE OFFICE LAW ENFORCEMENT PERSONNEL IMMEDIATELY!**

1. The date and time of occurrence or discovery of the release.
2. The location of the release (specific as possible).
3. The substance which was released (including chemical composition if available).
4. The quantity of material released.
5. Any death, injury, property damage, or threat of death, injury, or property damage.
6. The waters affected or threatened by a release.
7. The quantity entering any waters.
8. Any environmental damage or public health or safety consequences of the release.
9. The party responsible for the release, including address and phone number.
10. The cause of the release.
11. The actions being taken to mitigate the effects of the release.
12. Other on-scene agencies or parties.

13. Other agencies or parties notified.

14. The name, address, and phone numbers of the person making the report.

If necessary secure the site from public entry.

The steps in the notification process are: **(If at any time the next contact on the list is unavailable, proceed directly to the next set of notifications. However, all notifications need to be completed as soon as possible.)**

District Responsibilities

Legal Notifications

1. The District Office HMM Coordinator or backup if the coordinator is unavailable.
2. The National Response Center Duty Officer and record the discharge report number assigned by NRC. **Request the NRC to notify EPA.**
3. The Utah Division of Environmental Response and Remediation.
4. The local emergency planning committee chairperson.

Administrative Notifications

1. The BLM Utah State Office HMM Specialist or backup. **(This notification is to occur as quickly as possible after notification of a release.)**
2. District Manager, Area Manager, and District public information officer.
3. District law enforcement ranger.
4. Local law enforcement if necessary.
5. Notification of additional parties as dictated by the nature of the release and based on local District policy.

State Office Responsibilities

Administrative Notifications

1. The DOI Regional Environmental Officer.
2. State Office Chief of External Affairs.
3. Washington Hazardous Materials Office.
4. State Office Law Enforcement staff.
5. Notification of additional parties as dictated by the nature of the release or as requested by the District HMM coordinator.

See Tables 1 and 2 for the notification phone lists. Blanks have been left for each District Office to customize the list for their office. The legal notification list has also been made available to each District Office as a seperate document. It is recommended that each District customize this list and print it for field personnel to carry with them.

In addition to these required notifications, Appendix 6 contains a list of environmental hot line numbers which may be useful in providing assistance or knowledge in assessing the situation facing you.

When appropriate personnel arrive on the scene (**remember it is BLM policy that under no circumstances will BLM personnel or capital equipment be used for hazardous waste site or release investigation, control, or clean up [see Appendix 1]**), coordinate with the designated on-scene coordinator (OSC) when they arrive.

Shipment of any hazardous waste or material to a storage or disposal facility requires the completion of a hazardous waste manifest. If the responsible party is unknown, it will be necessary for you to obtain a generator's USEPA ID number from the Utah Division of Solid and Hazardous Waste (State of Utah, DEQ, Division of Solid & Hazardous Waste, 288 North 1460 West, SLC, 84114-4880). A seperate and new number has to be obtained for each release site. Temporary numbers for one-time cleanups may be obtained from the Division of Solid and Hazardous Waste. EPA Form #8700-12 Notification of Regulated Waste Activity has to be used. These forms have been supplied to each District Hazardous Materials Coordinator. For the location of the installation, Block III, use the location description of the release (i.e., township, range, section, road name, number, etc.) For the installation mailing address, use the address of the District Office. A letter justifying the need for a temporary number has to accompany the form. For assistance contact Delene Thomas at 801-538-6170. In an emergency the form and letter may be faxed to Delene Thomas at 801- 538-6715. Be prepared to have the District

Manager sign the hazardous waste manifest EPA Form 8700-22 (Appendix 7), representing the Bureau as the generator (only if the responsible party is unknown). Be certain the transporter is a licensed transporter and transportation is to a BLM approved RCRA disposal facility approved for the hazardous substance being shipped and that a copy of the manifest is returned within 30 days to the signer upon delivery to the RCRA facility.

TABLE 1
LEGAL NOTIFICATION LIST

1. District HMM Coordinator

Name: ____________________ **Backup:** ____________________

Work Phone: ____________________ **Work Phone:** ____________________

Home Phone: ____________________ **Home Phone:** ____________________

2. National Response Center

24 Hour: 800-424-8802 FTS: 202-426-2675 REQUEST THAT THEY NOTIFY EPA

3. Nuclear Regulatory Commission 24 Hour: 415-943-3830 (NOTIFY ONLY IN CASE OF RADIOACTIVE MATERIALS INVOLVED)

4. Utah Division of Environmental Response/remediation: 24-Hr. Phone: 536-4123

District Engineers:
Price: Dave Ariotte 637-3591
St. George: Wayne Thomas 673-3520
Richfield: Roger Foisey 896-5451
Vernal: Ted Allen 781-0770 X466

5. Local Emergency Planning Committee Chairperson

County: ____________________ **Name:** ____________________

Office Phone: ____________________ **Home Phone:** ____________________

County: ____________________ **Name:** ____________________

Office Phone: ____________________ **Home Phone:** ____________________

County: ____________________ **Name:** ____________________

Office Phone: ____________________ **Home Phone:** ____________________

County: ____________________ **Name:** ____________________

Office Phone: ____________________ **Home Phone:** ____________________

6. Optional Notifications

Name: ____________________ **Phone:** ____________________

Name: ____________________ **Phone:** ____________________

TABLE 2
ADMINISTRATIVE NOTIFICATION LIST

DISTRICT RESPONSIBILITIES

1. Utah State Office HMM Specialist

Name: Dick Traylor **Backup:** Bill Wagner

Wk Phone: FTS 801-539-4032 **Wk Phone:** FTS 801-539-4062

Home Phone: 801-278-7854 **Home Phone:** 801-278-8540

2. Management

District Manager: Name - ______________________

Home Phone: ______________ **Office Phone:** ______________

Resource Area: ______________ **A.M. Name -** ______________

Home Phone: ______________ **Office Phone:** ______________

Resource Area: ______________ **A.M. Name -** ______________

Home Phone: ______________ **Office Phone:** ______________

Resource Area: ______________ **A.M. Name -** ______________

Home Phone: ______________ **Office Phone:** ______________

Resource Area: ______________ **A.M. Name -** ______________

Home Phone: ______________ **Office Phone:** ______________

D.O. PIO Name: ______________________

Home Phone: ______________ **Office Phone:** ______________

3. BLM District Law Enforcement Ranger: **Name:** ______________

Office Phone: ______________ **Home Phone:** ______________

4. Local Law Enforcement

Name: ______________ **Phone:** ______________

STATE OFFICE RESPONSIBILITIES

1. DOI Regional Environmental Officer: FTS/Comm 303-236-6900

2. State Office Chief of External Affairs

Name: Jerry Meredith Office: FTS 801-539-4021, Home: 801-263-0247
or Don Banks, Home: 801-486-7527

3. Washington Hazardous Materials Office (750): FTS/Comm 202-653-7574

4. State Office Law Enforcement

Work Days FTS/Comm. 801-539-4084

After Hours: Marty Phillips 801-254-1383; Bart Fitzgerald 801-261-2505;
Chuck Huyck 801-576-0548

5. Optional Notifications

Name: ______________ **Phone:** ______________

Name: ______________ **Phone:** ______________

Obtain a clean-up certification statement from the State or contractor (whichever party does or supervises the cleanup).

One of the final steps is to prepare the Hazardous Substance Report (Appendix 8). Forward a copy of the Hazardous Substance Site Report to the State Office HMM specialist as soon as possible, but within 5 working days of the completion of the cleanup of the release. The SO HMM specialist will forward a copy to WO-750 and to the Utah Division of Environmental Response and Remediation, Attention CERCLA Branch, 1950 W. North Temple, Salt Lake City, Utah 84114-4840.

As a final step, the SO HMM specialist will arrange for a critique to be conducted on the handling of the response to determine if the system worked and if there are any suggestions for improvement.

B. Time-critical Response

These responses involve situations where there is not an immediate threat to public safety or critical resources, which is the case in an emergency response situation. In the case of a time-critical response, notification procedures are the same as for the emergency response, but time is usually available for site evaluation, clean-up strategy consideration, and use of traditional procurement methods for contracting or requesting services. In these type of responses the following must be completed.

Prior to initiating the notification process, to the extent possible, verify that the release has occurred, (with the person making the initial notification) that it is equal to or exceeds reportable quantities (see Appendix 2), and that it is on or is threatening public land resources.

In these incidents immediate notification must be made. Either as a witness or receiving information from someone else, obtain as much of the following data as possible: (If unable to provide any item or if the information is unsubstantiated, say so!)

An initial report form has been developed (Appendix 5) for use in gathering this data and in making the required official notifications. A copy of this completed report is to be faxed (801-539-4074) to the State Office Hazardous Material Specialist within 48 hours of the discovery or report of a time-critical response incident.

NOTE: IF CLANDESTINE OPERATION (DRUG LAB) IS SUSPECTED, NOTIFY LOCAL BLM OR STATE OFFICE LAW ENFORCEMENT PERSONNEL IMMEDIATELY!

1. The date and time of occurrence or discovery of the discharge or release.
2. The location of the discharge or release (specific as possible).
3. The substance which was discharged or released (including chemical composition if available).
4. The quantity of material discharged or released.
5. Any death, injury, property damage, or threat of death, injury, or property damage.
6. The waters affected or threatened by a discharge or release.
7. The quantity entering any waters.

8. Any environmental damage or public health or safety consequences of the discharge or release.

9. The party responsible for the discharge or release, including address and phone number.

10. The cause of the discharge or release.

11. The actions being taken to mitigate the effects of the discharge or release.

12. Other on-scene agencies or parties.

13. Other agencies or parties notified.

14. The name, address, and phone numbers of the person making the report.

If necessary secure the site from public entry.

The steps in the notification process are: (If at any time the next contact on the list is unavailable, proceed directly to the next set of notifications. However, all notifications need to be completed as soon as possible.)

District Responsibilities

Legal Notifications

1. The District Office HMM Coordinator or backup if the coordinator is unavailable.
2. The National Response Center Duty Officer and record the discharge report number assigned by NRC. Request NRC to notify EPA.
3. The Utah Division of Environmental Response and Remediation.
4. The local emergency planning committee chairperson.

Administrative Notifications

1. The BLM Utah State Office HMM Specialist or backup. (This notification is to occur as quickly as possible after notification of a release.)
2. District Manager, Area Manager, and District public information officer.
3. District law enforcement ranger.
4. Local law enforcement if necessary.
5. Notification of additional parties as dictated by the nature of the release and based on local District policy.

State Office Responsibilities

Administrative Notifications

1. The DOI Regional Environmental Officer.
2. State Office Chief of External Affairs.
3. Washington Hazardous Materials Office.
4. State Office Law Enforcement staff.
5. Notification of additional parties as dictated by the nature of the release or as requested by the District HMM coordinator.

See Tables 3 and 4 for the notification phone lists. Blanks have been left for each District Office to customize the list for their office. The legal notification list has also been made available to each District Office as a separate document. It is recommended that each District customize this list and print it for field personnel to carry with them.

In addition to these required notifications, Appendix 6 contains a list of environmental hot line numbers which may be useful in providing assistance or knowledge in assessing the situation facing you.

Upon completion of the notification, the next required step is to prepare a removal preliminary assessment (RPA). See Appendix 9 for the form to be used. The purpose of the RPA is to determine the best course of action to follow for cleaning up the release. Upon completion and approval of the RPA, removal may proceed or the site may be moved to the non-time-critical response category. The RPA must be completed within 5 working days of the discovery of the release.

When appropriate personnel arrive on the scene (remember it is BLM policy that under no circumstances will BLM personnel or capital equipment be used for hazardous waste site or release investigation, control, or clean up [see Appendix 1]), coordinate with the designated on-scene coordinator (OSC) when they arrive.

Shipment of any hazardous waste or material to a storage or disposal facility requires the completion of a hazardous waste manifest. If the responsible party is unknown, it will be necessary for you to obtain a generator's USEPA ID number from the Utah Bureau of Solid and Hazardous Waste. A separate and new number has to be obtained for each release site. Temporary numbers for one time cleanups may be obtained from the Bureau of Solid and Hazardous Waste. Form #OMB 2050-0028 Notification of Regulated Waste Activity has to be used. These forms have been supplied to each District Hazardous Materials Coordinator. For the location of the installation, Block III, use the location description of the release (i.e., township, range, section, road name, number, etc.) For the installation mailing address, use the address of the District Office. A letter justifying the need for a temporary number has to accompany the form. For assistance contact Delene Thomas at 801-538-6170. In an emergency the form and letter may be faxed to Delene Thomas at 801- 538-6715. Be prepared to have the District Manager sign the hazardous waste manifest EPA Form 8700-22 (Appendix 7), representing the Bureau as the generator (only if the responsible party is unknown). Be certain the transporter is a licensed transporter and transportation is to a BLM approved RCRA disposal facility approved for the hazardous substance being shipped and that a copy of the manifest is returned to the signer within 30 days upon delivery to the RCRA facility.

TABLE 3
LEGAL NOTIFICATION LIST

1. District HMM Coordinator

Name: ______________ **Alternate:** ______________

Work Phone: ______________ **Work Phone:** ______________

Home Phone: ______________ **Home Phone:** ______________

2. National Response Center

24 Hour: 800-424-8802 FTS: 202-426-2675 REQUEST THAT THEY NOTIFY EPA

3. Nuclear Regulatory Commission 24 Hour: 415-943-3830 (NOTIFY ONLY IN CASE OF RADIOACTIVE MATERIALS INVOLVED)

4. Utah Division of Environmental Response/remediation: 24-Hr. Phone: 536-4123

District Engineers: Price: Dave Ariotte 637-3591
St. George: Wayne Thomas 673-3520
Richfield: Roger Foisey 896-5451
Vernal: Ted Allen 781-0770 X466

5. Local Emergency Planning Committee Chairperson

County: ______________ **Name:** ______________

Office Phone: ______________ **Home Phone:** ______________

County: ______________ **Name:** ______________

Office Phone: ______________ **Home Phone:** ______________

County: ______________ **Name:** ______________

Office Phone: ______________ **Home Phone:** ______________

County: ______________ **Name:** ______________

Office Phone: ______________ **Home Phone:** ______________

6. Optional Notifications

Name: ______________ **Phone:** ______________

Name: ______________ **Phone:** ______________

TABLE 4
ADMINISTRATIVE NOTIFICATION LIST

DISTRICT RESPONSIBILITIES

1. **Utah State Office HMM Specialist**

Name: Dick Traylor	Backup: Bill Wagner
Wk Phone: FTS 801-539-4032	Wk Phone: FTS 801-539-4062
Home Phone: 801-278-7854	Home Phone: 801-278-8540

2. **Management**

District Manager: Name - ____________________

Home Phone: ____________________ Office Phone: ____________________

Resource Area: ____________________ A.M. Name - ____________________

Home Phone: ____________________ Office Phone: ____________________

Resource Area: ____________________ A.M. Name - ____________________

Home Phone: ____________________ Office Phone: ____________________

Resource Area: ____________________ A.M. Name - ____________________

Home Phone: ____________________ Office Phone: ____________________

Resource Area: ____________________ A.M. Name - ____________________

Home Phone: ____________________ Office Phone: ____________________

D.O. PIO Name: ____________________

Home Phone: ____________________ Office Phone: ____________________

3. **BLM District Law Enforcement Ranger:** Name: ____________________

Office Phone: ____________________ Home Phone: ____________________

4. **Local Law Enforcement**

Name: ____________________ Phone: ____________________

STATE OFFICE RESPONSIBILITIES

1. **DOI Regional Environmental Officer:** FTS/Comm 303-236-6900
2. **State Office Chief of External Affairs**

Name: Jerry Meredith Office: FTS 801-539-4021, Home: 801-263-0247
or Don Banks, Home: 801-486-7527

3. **Washington Hazardous Materials Office (750):** FTS/Comm 202-653-7574
4. **State Office Law Enforcement**

Work Days FTS/Comm. 801-539-4084

After Hours: Marty Phillips 801-254-1383; Bart Fitzgerald 801-261-2505;
Chuck Huyck 801-576-0548

5. **Optional Notifications**

Name: ____________________ Phone: ____________________

Name: ____________________ Phone: ____________________

Obtain clean-up certification statement from the State or contractor (whichever party does or supervises the cleanup).

One of the final steps is to prepare the Hazardous Substance Site Report (Appendix 8). Forward a copy of the Hazardous Substance Site Report to the State Office HMM specialist as soon as possible, but within five working days of the completion of the cleanup of the release. The SO HMM specialist will forward a copy to WO-750 and to the Utah Division of Environmental Response and Remediation, Attention CERCLA Branch, 1950 W. North Temple, Salt Lake City, Utah 84114-4840.

As a final step, the SO HMM specialist will arrange for a critique to be conducted on the handling of the release response to determine if the system worked and if there are any suggestions for improvement.

C. Non-time-critical Response

The following actions must be completed upon discovery or identification of such sites.

1. Notification to the DO HMM Coordinator or backup.

2. Notification to the SO HMM Specialist or backup.

3. Complete the "Hazardous Materials Site Report" (Appendix 8) and the "Notification of Hazardous Waste Site Form" (Appendix 10), as required by CERCLA Section 103(c) within 5 days of discovery. This form is still used by EPA Region VIII for discovery into CERCLIS.

4. Forward the "Hazardous Materials Site Report" and the "Notification of Hazardous Waste Site Report" to the District Office HMM Coordinator who will in turn forward to the SO HMM Specialist.

5. The SO HMM Specialist will coordinate with the EPA Region VIII and the Utah Division of Environmental Response and Remediation to determine appropriate steps to be followed and reports to be submitted.

If the initial site examination determines that a release or threat of release exists but does not require an emergency or time-critical response, then procedures must be followed to determine whether a removal assessment or a remedial assessment process should be followed. Even though the site does not poise an immediate threat and is not time-critical, the goal is to take care of the problem at the earliest possible stage. Work closely with the State Office HMM Specialist to determine the steps to take.

A flow chart of the steps involved is shown in figure 3-1. The National Contingency Plan (NCP) and EPA procedures provide for a removal process prior to listing a site on CERCLIS and the Federal Facilities Docket. The removal process, if appropriate and adequate, could provide significant cost and time savings to BLM. A decision to follow a removal or remedial process is made on a case by case basis after site discovery and evaluation.

A Site Background Record (SBR) will be required in all cases. See Appendix 11 for guidance on the content of a SBR. A Bureau handbook is being prepared on this process.

Div
Chap 4

CHAPTER 4

WASHINGTON OFFICE REPORTING REQUIREMENTS

1. A verbal report to WO (750 FTS 202-653-7574) is required within 24 hours of a hazardous substance release if any of the following are involved:

   Death
   Injury
   Substantial Property Damage

2. A verbal report to WO 750 (FTS 202-653-7574) is required within 48 hours of a hazardous substance release for releases not involving injury or significant damage, but that produce substantial public or media attention in local area or region.

3. A written report on all releases is required within 10 working days of discovery.

In order to meet the time frame for the written report, either the initial report (Appendix 5) or the HMM site report (Appendix 8) (whichever one is available) can be used to satisfy this requirement.

These reports should be coordinated with and sent through the SO HMM specialist; however, if the SO specialist or backup are unavailable, the DO HMM Coordinator will complete the reporting requirements with copies to the SO HMM Specialist.

CHAPTER 5

PUBLIC AFFAIRS

BLM activities involving hazardous substances often attract public attention, concern, and anxiety. Many different regulatory agencies can often become involved. For these reasons, public affairs personnel must be appraised of the activity and kept informed of circumstances. Let trained public affairs personnel work with the news media and other interested and involved public as appropriate. See the generic public affairs plan for Hazardous Substances Management in Appendix 12. The generic plan can be used as a guide to prepare a case-by-case site-specific plan designed to meet the needs of the Resource Area or District as the activity dictates. Each District Office will be required to prepare a generic hazardous substances release public affairs plan for the District.

CHAPTER 6

SITE NUMBERING AND RECORD KEEPING

In addition to obtaining a NRC report number, it is necessary to number each release whether it be an emergency, time-critical, or non-time-critical response. Use the following numbering system: first two digits is the State two letter code (UT); the next two digits is the fiscal year (e.g., 92) of the year the release was discovered and reported; the next two digits the District code (e.g., 04); and the next two digits the release number starting over each fiscal year. For example: UT-92-04-01 would be the first release in fiscal year 1992 in the Cedar City District. Each District is required to keep a log of all releases occurring in the District.

All hazardous substance releases have the potential for both personal and organization liability, therefore, it is not only important to follow the law, but to document all actions taken. Once a hazardous substance release has been reported, a permanent site administrative file is to be initiated and maintained. This administrative file is to be maintained in both the District Office as well as the State Office. Therefore, it will be necessary for the District HMM coordinator to insure that copies of all material within the administrative file is provided to the State Office HMM Specialist.

The site administrative file has to stand alone, it cannot incorporate other files by reference. Other files pertinent to the action have to be made a part of the site administrative file. It is from this file that the official administrative record is created in coordination with the Solicitor.

The site administrative file is to contain at a minimum the following:

1. Initial hazardous substance release report (Appendix 5).
2. Hazardous substance release site report (Appendix 8).
3. Removal preliminary assessment report (Appendix 9).
4. Any reports received from a contractor working on the release.
5. Copy of the hazardous waste manifest (Appendix 7).
6. Copy of the letter and form requesting a temporary EPA ID number.
7. Any data pertaining to the site, hazardous material, response actions, notes, and phone conversation documentation.

8. Records of all expenses incurred by BLM, i.e., travel, long-distance phone calls, etc.

9. Any correspondence dealing with the release, site, or response. Remember any correspondence with responsible parties (of known or suspected hazardous substances releases) should be drafted by or in coordination with the Solicitor's office since there are specific requirements in law that must be included in such correspondence.

10. All photos with date, locations, and photo points.

11. A chronological record of all events pertaining to the release or site.

12. Final cleanup certification and/or report.

13. Follow up/monitoring reports.

Some do's and dont's for developing and maintaining the site administrative file are:

Do not use the file as a dumping place for material that you don't know what to do with.

If the material does not pertain to the release, site, or response, do not include it.

If the material pertains to the release, site, or response only in a minor way, include it but with a discussion as to how and why it pertains.

Do include signed and dated memos and letters, but do not include unsigned, undated, draft memos and letters.

All material must contain a date, including the year and name of the person responsible for the material.

Do make sure that all material is readable (handwritten or typed) and that it is understandable to a third party.

Phone call documentation must include name of person called, who made the call, purpose of call, date including year, and a summary of the discussion which took place. Merely including a yellow phone call slip with cryptic notes on it is insufficient.

Do maintain the file material in chronological order starting with the latest material on top to the earliest on the bottom.

Handwritten notes have to mean something. Notes to yourself to accomplish an action have no meaning. All notes require a name and date.

Cryptic meeting notes are of no use. Take time to transcribe all meeting notes, especially recording decisions reached. Make sure that all attendees are listed. If items not dealing with the subject release, site, or response are discussed, do not include them in the meeting summary.

CHAPTER 7

CONTRACTING PROCEDURES

Development of a State-wide Blanket Purchase Agreement is underway. This contract should be in place by October 1, 1992. In the meantime, if emergency response or other activities are required, regular contracting procedures will have to be used. In an emergency, the EPA emergency response team can be used. Other contracting needs can be quickly obtained in an emergency. If contracting assistance is required immediately contact the SO Hazardous Materials Specialist or the SO Contracting Officer.

CHAPTER 8

LAW ENFORCEMENT AND INVESTIGATION

RESERVED

APPENDIX 1

SITE ENTRY POLICY

Message 733-41
Subj: im 90-534

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

In Reply Refer To:
1112(702)
1703(707)

EMS Transmission 7/16/90 July 12, 1990
Instruction Memorandum No. 90-534
Expires: 9/30/91

To: All Washington Office and Field Officials

From: Director

Subject: Interim Policy for Entry onto Hazardous Waste Sites

This instruction clarifies the Bureau's interim policy concerning entry onto hazardous waste sites. It is designed to protect the health and safety of BLM personnel and minimize potential liability for the Bureau. It shall be operative until a full policy analysis and benefit-cost analysis is completed, and a final Bureau-wide policy for entry onto hazardous waste sites is established.

Government agencies as well as private employers are directly responsible for the health and safety of their employees and subject to the general duty requirement of Section 5(a)(1) of the Occupational Safety and Health Act of 1970.

This interim policy pertains to entry onto sites where there is a known or suspected release of hazardous substances or wastes, or where there is a significant threat of release. Any released hazardous substance becomes, by definition, a hazardous waste. For this instruction, a hazardous waste site is defined as:

1) A site which has been reported to the Environmental Protection Agency (EPA) under Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), Sections 3005 or 3010 of the Resource Conservation and Recovery Act of 1976 (RCRA), or related statutes, or entered into the Comprehensive Response, Compensation and Liability Information System (CERCLIS), or placed on the Federal Facilities Docket;

2) A site which is designated in the preliminary assessment or site investigation as either Class II, III or IV in accordance with the BLM site classification system (Attachment 1);

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3) A site where conditions require either Level A, B or C protection in accordance with the EPA standard levels of protection (Attachment 2); or

4) A site which has not been reported, assessed or investigated, but where past or present land uses or conditions indicate that hazardous waste may be present and that the above mentioned site classifications or levels of protection may be justified. When in doubt, assume the worst case until additional information becomes available.

IT IS THE BUREAU OF LAND MANAGEMENT'S INTERIM POLICY TO PROHIBIT BLM PERSONNEL FROM ENTERING ONTO ANY HAZARDOUS WASTE SITE, WITH THE SINGLE EXCEPTION AS STATED BELOW. UNDER NO CIRCUMSTANCES WILL BLM PERSONNEL OR CAPITAL EQUIPMENT BE USED FOR HAZARDOUS WASTE SITE OR INCIDENT INVESTIGATION, CONTROL OR CLEAN UP.

The BLM personnel may be allowed to enter certain hazardous waste sites for specific purposes within the scope of their jobs. Job-related duties which may justify entry are: 1) inspections required under permit and lease agreements, 2) monitoring and oversight of contracts, and 3) other official duties. Entry onto hazardous waste sites out of curiosity or for the purpose of touring is prohibited. On-site entry is strictly limited to the following conditions:

1) The site (or section of the site to be entered) must be officially designated as CONTROLLED by EPA or State government authorities or by BLM contractor's safety and health officer, and of low risk such that Level D protection is sufficient;

2) Entering personnel must be specifically authorized in their position descriptions to enter onto hazardous waste sites to carry out specific job-related duties;

3) Entering personnel must receive WRITTEN authorization from the State Directors having jurisdiction;

4) Entering personnel and their supervisors must meet all requirements of 29 CFR 1910.120 and 40 CFR 300.38, including training, medical surveillance and such conditions as not entering a site alone; and

5) No employee shall be required to enter a known or suspected hazardous waste site against his or her will.

Questions or comments concerning this interim policy should be directed to Paul Lynch, Chief, Safety Staff (Com. (202) 653-8851 or FTS 653-8851) or Bernie Hyde, Chief, Hazardous Materials Staff (Com. (202) 208-5517 or FTS 268-5517).

Signed	Authenticated
John J. Moeller	Georgette A. Fogle
Acting Assistant Director, Support Service	Directives (WO 855)

2 Attachments
- 1 - BLM Site Classification System (1 p.)
- 2 - EPA Standard Levels of Protection (2 pp.)

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BLM SITE CLASSIFICATION SYSTEM

Class I	There is no significant reason to believe that hazardous wastes or other hazardous substances have been generated, treated, stored or disposed at the site; or alternatively that hazardous wastes were disposed but in such quantities, forms, or under such conditions that there is negligible hazard to human health and the environment.
Class II	Hazardous wastes or other hazardous substances are present but there is small risk of on-site contact or release of contaminants to the environment in such form and quantity that they would constitute a significant hazard to human health or to the environment.
Class III	Hazardous wastes or other hazardous substances exist on the site in such form and quantity and under such conditions that there is specific reason to believe that a potentially significant hazard to human health or the environment may exist and that further definitive investigations must be undertaken.
Class IV	Hazardous wastes or other hazardous substances exist on the site in such form and in such quantity and under such conditions, including off-site considerations, as to constitute an imminent and substantial endangerment to human health or to the environment.

Attachment 1-1

EPA STANDARD LEVELS OF PROTECTION

Level A 1) One or more hazardous substances have been identified and the highest level of protection for skin, eyes and the respiratory system is required due to either the measured (or potential for) high concentrations of atmospheric vapors, gases or particulates, or the site operations and work functions involve a high potential for splash, immersion or exposure to unexpected vapors, gases or particulates of materials that are harmful to skin or capable of being absorbed through the skin;

2) Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible; or

3) Operations are being conducted in confined, poorly ventilated areas, and the absence of conditions requiring Level A protection have not been determined.

Level B 1) The type and atmospheric concentration of substances have been identified and require a high level of respiratory protection, but less skin protection;

2) The atmosphere contains less than 19.5 percent oxygen; or

3) The presence of incompletely identified vapors or gases is indicated by a direct-reading organic vapor detection instrument, but vapors and gases are not suspected of containing high levels of chemicals harmful to skin or capable of being absorbed through the skin.

Attachment 2-1

Level C

1) The atmospheric contaminants, liquid splashes or other direct contact will not adversely affect or be absorbed through any exposed skin;

2) The types of air contaminants have been identified, concentrations measured, and an air-purifying respirator is available that can remove the contaminants; and

3) All criteria for the use of air-purifying respirators are met.

Level D

1) The atmosphere contains no known hazard; and

2) Work functions preclude splashes, immersion, or the potential for unexpected inhalation of or contact with hazardous levels of any chemicals.

Attachment 2-2

W0855 for UT950 06:23 MDT 16-Jul-90 Message 733-41 ¼1¼ * Priority *

OFFICE
COMMENT
COORDINATE
APPROVAL

Dana make copy for [illegible] & Bill Wagner

Message 782-1550
Subj: im 90-534 chl

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

In Reply Refer To:
1112(70
1703(70

October 9, 1990

EMS Transmission 10/11/90
Instruction Memorandum No. 90-534, Change 1
Expires: 9/30/91

To: All Washington Office and Field Officials

From: Director

Subject: Interim Policy for Entry onto Hazardous Waste Sites

This instruction revises IM No. 90-534 and clarifies the Bureau's interim policy concerning entry onto hazardous waste sites. It is designed to protect the health and safety of BLM personnel and minimize potential liability for the Bureau. It shall be operative until a full policy analysis and benefit-cost analysis is completed, and a final Bureau-wide policy for entry onto hazardous waste sites is established.

This interim policy is not intended to replace or supersede existing policies and procedures concerning pesticide applications, hydrogen sulfur operations at oil and gas sites, cyanide operations at mining sites, or any other Bureau manual guidance concerning the safe handling and use of hazardous chemicals or substances.

Government agencies as well as private employers are directly responsible for the health and safety of their employees and subject to the general duty requirement of Section 5(a)(1) of the Occupational Safety and Health Act of 1970. Furthermore, Section 126 of Title I of the Superfund Amendments and Reauthorization Act of 1986 mandates protection of workers engaged in hazardous waste operations and emergency response activities.

This interim policy pertains to entry onto sites where there is a known or suspected release of hazardous substances, or where there is a substantial threat of release. Any released hazardous substance becomes, by regulatory definition, a hazardous waste. This instruction applies only to the following hazardous waste sites:

1) A site which has been reported to the Environmental Protection Agency (EPA) under Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), Sections 3005 or 3010 of the Resource Conservation and Recovery Act of 1976 (RCRA), or related statutes, or entered into the Comprehensive Response, Compensation and Liability Information System (CERCLIS), or placed on the Federal Facilities Docket; 2

2) A site which is designated in the preliminary assessment or site investigation as either Class III or IV in accordance with the BLM site classification system (Attachment 1);

(Note: BLM personnel are permitted to enter Class I and II sites.)

3) A site where conditions require either Level A, B or C protection in accordance with the EPA standard levels of protection (Attachment 2); or

4) A site which has not been reported, assessed or investigated, but where physical evidence indicates that hazardous waste may be present, such as at emergency response incidents. When in doubt, assume the worst case until additional information becomes available.

IT IS THE BUREAU OF LAND MANAGEMENT'S INTERIM POLICY TO PROHIBIT BLM PERSONNEL FROM ENTERING ONTO ANY HAZARDOUS WASTE SITE, WITH THE SINGLE EXCEPTION AS STATED BELOW. UNDER NO CIRCUMSTANCES WILL BLM PERSONNEL OR CAPITAL EQUIPMENT BE USED FOR HAZARDOUS WASTE SITE OR INCIDENT INVESTIGATION, CONTROL OR CLEAN UP.

The BLM personnel may be allowed to enter certain hazardous waste sites for specific purposes within the scope of their jobs. Job-related duties which may justify entry are: 1) inspections required under permit and lease agreements, 2) monitoring and oversight of contracts, and 3) other official duties. Entry onto hazardous waste sites out of curiosity or for the purpose of touring is prohibited. On-site entry is strictly limited to the following conditions:

1) The site (or section of the site to be entered) must be officially designated as CONTROLLED by EPA or State government authorities, or the BLM contractor's safety and health officer determines that the risk is so low that Level D protection is sufficient;

2) Entering personnel must be specifically authorized in their position descriptions to enter onto hazardous waste sites to carry out specific job-related duties;

3) Entering personnel must receive WRITTEN authorization from the State Directors having jurisdiction, or from the District Manager having jurisdiction if the State Director delegates this authority;.

4) Entering personnel and their supervisors must meet all requirements of 29 CFR 1910.120 and 40 CFR 300.38, including:

   Training
   Medical surveillance
   Site-specific safety and health plan
   Other conditions required by law and regulation;

5) No employee shall enter a site alone; and

6) No employee shall be required to enter a known or suspected hazardous waste site against his or her will.

Questions or comments concerning this interim policy should be directed to Paul Lynch, Chief, Safety Staff (Com. (202) 653-8851 or FTS 653-8851) or Bernie Hyde, Chief, Division of Hazardous Materials Management (Com. (202) 208-5517 or FTS 268-5517).

Signed
Mike Penfold
Acting Deputy Director

Authenticated
Georgette A. Fogle
Directives (WO 855)

2 Attachments
1 - BLM Site Classification System (1 p.)
2 - EPA Standard Levels of Protection (2 pp.)

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APPENDIX 2

OIL RELEASE QUANTITIES
AND
LIST OF LISTS

Oil Release Quantities

The National Contingency Plan requires notification of oil releases or threat thereof. The basis for the requirement is CERCLA which folds in the definition of hazardous waste substances covered in the Clean Water Act.

The Clean Water Act states: "There should be no discharges of oil or hazardous substances into or upon the navigable waters of the U.S., adjoining shorelines, or into or upon the waters of the contiguous zone, or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the U.S."

The Clean Water Act defines oil as: oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

The reportable amount is any sheen on water. With rare exceptions, any oil spill has the potential for contaminating either surface or ground water. Therefore, to be legally safe any oil release is to be reported.

United States
Environmental Protection
Agency

Pesticides And
Toxic Substances
(TS-779)

Solid Waste And
Emergency Response
(OS-120)

EPA 560/4-92-011

900-8-92-002

January 1992

Title III
List Of Lists

Consolidated List Of Chemicals Subject To Reporting Under The Emergency Planning And Community Right-To-Know Act

(Title III Of The Superfund Amendments And Reauthorization Act Of 1986)

- SARA Section 302 Extremely Hazardous Substances
- CERCLA Hazardous Substances
- SARA Section 313 Toxic Chemicals

051

SARA TITLE III
CONSOLIDATED CHEMICAL LIST

This consolidated chemical list includes chemicals subject to reporting requirements under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)[1], also known as the Emergency Planning and Community Right-to-Know Act (EPCRA). It has been prepared to help firms handling chemicals determine whether they need to submit reports under sections 302, 304, or 313 of Title III and, for a specific chemical, what reports may need to be submitted. Separate lists are also provided of RCRA waste streams and unlisted hazardous wastes, and of radionuclides reportable under CERCLA. These lists should be used as a reference tool, not as a definitive source of compliance information. Compliance information is published in the Code of Federal Regulations, 40 CFR Parts 302, 355, and 372.

The chemicals on the consolidated list are ordered by Chemical Abstract Service (CAS) registry number. Categories of chemicals, which do not have CAS registry numbers, but which are cited under CERCLA and section 313, are placed at the end of the list. For reference purposes, the chemicals (with their CAS numbers) are ordered alphabetically following the CAS-order list. Long chemical names may have been truncated to facilitate printing of this list.

The list includes chemicals referenced under four federal statutory provisions, discussed below. More than one chemical name may be listed for one CAS number because the same chemical may appear on different lists under different names. For example, for CAS number 8001-35-2, the names toxaphene (from the section 313 list), camphechlor (from the section 302 list), and camphene, octachloro- (from the CERCLA list) all appear on this consolidated list. However, the chemicals listed under SARA Title III have many more synonyms than appear on this list.

(1) SARA Section 302 Extremely Hazardous Substances (EHSs)

The presence of EHSs in quantities in excess of the Threshold Planning Quantity (TPQ), requires certain emergency planning activities to be conducted. The extremely hazardous substances and their TPQs are listed in 40 CFR Part 355, Appendices A and B.

TPQ. The consolidated list presents the TPQ (in pounds) for section 302 chemicals in the column following the chemical name. For chemicals that are solids, there may be two TPQs given (e.g., 500/10,000). In these cases, the lower quantity applies for solids in powder form with particle size less than 100 microns, or if the substance is in solution or in molten form. Otherwise, the 10,000 pound TPQ applies.

EHS RQ. Releases of reportable quantities (RQ) of EHSs are subject to state and local reporting under section 304 of Title III. If a chemical listed under section 302 does not have a CERCLA RQ, a statutory RQ of one pound applies for section 304 reporting. The EHS RQ column lists the one-pound statutory RQ for EHSs not listed under CERCLA.

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[1] **This consolidated list does not include all chemicals subject to the reporting requirements in sections 311 and 312 of SARA Title III. These hazardous chemicals, for which material safety data sheets (MSDS) must be developed under Occupational Safety and Health Act Hazard Communication Standards, are identified by broad criteria, rather than by enumeration. There are over 500,000 products that satisfy the criteria. See 40 CFR Part 370 for more information.**

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(2) CERCLA Hazardous Substances ("RQ chemicals")

Releases of CERCLA hazardous substances, in quantities equal to or greater than their reportable quantity (RQ), are subject to reporting to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, or "Superfund"). Such releases are also subject to state and local reporting under section 304 of Title III. CERCLA hazardous substances, and their reportable quantities, are listed in 40 CFR Part 302, Table 302.4. On January 23, 1989, all section 302 chemicals not already listed under CERCLA were proposed for listing, and on August 30, 1989, adjusted RQs (not included in this document) were proposed for these chemicals. This document includes chemicals added to the CERCLA list because they are listed as hazardous air pollutants under section 112(b) of the Clean Air Act (CAA) of 1990. Radionuclides listed under CERCLA are provided in a separate list, with RQs in Curies.

RQ. The CERCLA RQ column in the consolidated list shows the RQs (in pounds) for chemicals that are CERCLA hazardous substances. An asterisk ("*") following the RQ indicates that no reporting of releases is required if the diameter of the pieces of the solid metal released is 100 micrometers (0.004 inches) or greater. Substances listed under CAA section 112(b) that have been added to the CERCLA list with statutory one-pound RQs are indicated by a plus sign ("+") following the RQ.

Note that the consolidated list does not include all CERCLA regulatory synonyms. See 40 CFR Part 302, Table 302.4 for a complete list.

(3) SARA Section 313 Toxic Chemicals

Emissions or releases of chemicals listed under section 313 must be reported annually as part of SARA Title III's community right-to-know provisions. The rule containing these chemicals was published on February 16, 1988 (53 FR 4500) (40 CFR Part 372).

Section 313. The notation "313" in the column for section 313 indicates that the chemical is subject to reporting under section 313 under the name listed. An "X" in this column indicates that the same chemical with the same CAS number appears on another list with a different chemical name.

Be aware that using or processing dissociable ammonium salts may produce ammonia in solution. Ammonia is reportable under section 313.

(4) Chemical Categories

The CERCLA and SARA section 313 lists include a number of chemical categories as well as specific chemicals. The chemicals on this consolidated list have not been systematicly evaluated to determine whether they fall into any listed categories.

Some chemicals not specifically listed under CERCLA may be subject to CERCLA reporting as part of a category. For example, strychnine, sulfate (CAS number 60-41-3), listed under SARA section 302, is not on the CERCLA list, but may be subject to CERCLA reporting under the listing for strychnine and salts (CAS number 57-24-9), with an RQ of 10 pounds. Similarly, nicotine sulfate (CAS number 65-30-5) may be subject to CERCLA reporting under the listing for nicotine and salts (CAS number 54-11-5, RQ 100 pounds), and warfarin sodium (CAS number 129-06-6) may be subject to CERCLA reporting under the listing for warfarin and salts, concentration >0.3% (CAS number 81-81-2, RQ 100 pounds). The CERCLA list also includes a number of generic categories that have not been assigned RQs; chemicals falling into listed categories are considered CERCLA hazardous substances, but are not required to be reported under CERCLA unless an RQ has been assigned.

A number of chemical categories are subject to section 313 reporting. They appear at the end of the CAS number listing. Be aware that certain chemicals reportable under section 302 or CERCLA may belong to section 313 categories. For example, mercuric acetate (CAS number 1600-27-7), listed under section 302, is not specifically listed under section 313, but could be reported under section 313 as "Mercury Compounds" (no CAS number).

(5) RCRA Hazardous Wastes

The consolidated list includes specific chemicals from the P and U lists only (40 CFR 261.33). This listing is provided as an indicator that companies may already have data on a specific chemical that may be useful for Title III reporting. It is not intended to be a comprehensive list of RCRA P and U chemicals. RCRA hazardous wastes consisting of waste streams on the F and K lists, and wastes exhibiting the characteristics of ignitibility, corrosivity, reactivity, and EP toxicity, are provided in a separate list. The descriptions of the F and K waste streams have been abbreviated; see 40 CFR Part 302, Table 302.4 for complete descriptions.

RCRA Code. The letter-and-digit code in the RCRA Code column is the chemical's RCRA hazardous waste code.

Information Sources

For additional copies of this or other Title III documents, send requests to:

Section 313 Document Distribution Center
P.O. Box 12505
Cincinnati, OH 45212

Refer to document number EPA 560/4-92-012 for additional copies of this document.

A dBase version of this consolidated list is available on disk from:

National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4600

Refer to PB89 158653.

Questions concerning changes to the list or other aspects of Title III may be submitted in writing to:

Emergency Planning and Community Right-to-Know Information Hotline
U.S. Environmental Protection Agency (OS-120)
401 M Street, SW
Washington, DC 20460

Alternatively, you may call the hotline at (800) 535-0202 between the hours of 8:30 AM and 7:30 PM Eastern Time.

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CONSOLIDATED CHEMICAL LIST
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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
50-00-0	Formaldehyde	500		100	313	U122
50-07-7	Mitomycin C	500/10,000		10		U010
50-14-6	Ergocalciferol	1,000/10,000	1			
50-18-0	Cyclophosphamide			10		U058
50-29-3	DDT			1		U061
50-32-8	Benzo[a]pyrene			1		U022
50-55-5	Reserpine			5,000		U200
51-21-8	Fluorouracil	500/10,000	1			
51-28-5	2,4-Dinitrophenol			10	313	P048
51-43-4	Epinephrine			1,000		P042
51-75-2	Nitrogen mustard	10	1		313	
51-75-2	Mechlorethamine	10	1		X	
51-79-6	Urethane			100	313	U238
51-79-6	Carbamic acid, ethyl ester			100	X	U238
51-79-6	Ethyl carbamate			100	X	U238
51-83-2	Carbachol chloride	500/10,000	1			
52-68-6	Trichlorfon			100	313	
52-85-7	Famphur			1,000		P097
53-70-3	Dibenz[a,h]anthracene			1		U063
53-96-3	2-Acetylaminofluorene			1	313	U005
54-11-5	Nicotine	100		100		P075
54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)	100		100		P075
54-11-5	Nicotine and salts			100		P075
54-62-6	Aminopterin	500/10,000	1			
55-18-5	N-Nitrosodiethylamine			1	313	U174
55-21-0	Benzamide				313	
55-63-0	Nitroglycerin			10	313	P081
55-91-4	Isofluorphate	100		100		P043
55-91-4	Diisopropylfluorophosphate	100		100		P043
56-04-2	Methylthiouracil			10		U164
56-23-5	Carbon tetrachloride			10	313	U211
56-25-7	Cantharidin	100/10,000	1			
56-38-2	Parathion	100		10	313	P089
56-49-5	3-Methylcholanthrene			10		U157
56-53-1	Diethylstilbestrol			1		U089
56-55-3	Benz[a]anthracene			10		U018
56-72-4	Coumaphos	100/10,000		10		
57-12-5	Cyanides (soluble salts and complexes)			10		P030
57-14-7	1,1-Dimethyl hydrazine	1,000		10	313	U098
57-14-7	Dimethylhydrazine	1,000		10	X	U098

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
57-14-7	Hydrazine, 1,1-dimethyl-	1,000		10	X	U098
57-24-9	Strychnine	100/10,000		10		P108
57-24-9	Strychnine, and salts			10		P108
57-47-6	Physostigmine	100/10,000	1			
57-57-8	beta-Propiolactone	500		1+	313	
57-64-7	Physostigmine, salicylate (1:1)	100/10,000	1			
57-74-9	Chlordane	1,000		1	313	U036
57-97-6	7,12-Dimethylbenz[a]anthracene			1		U094
58-36-6	Phenoxarsine, 10,10'-oxydi-	500/10,000	1			
58-89-9	Lindane	1,000/10,000		1	313	U129
58-89-9	Hexachlorocyclohexane (gamma isomer)	1,000/10,000		1	X	U129
58-90-2	2,3,4,6-Tetrachlorophenol			10		U212
59-50-7	p-Chloro-m-cresol			5,000		U039
59-88-1	Phenylhydrazine hydrochloride	1,000/10,000	1			
59-89-2	N-Nitrosomorpholine			1+	313	
60-00-4	Ethylenediamine-tetraacetic acid (EDTA)			5,000		
60-09-3	4-Aminoazobenzene				313	
60-11-7	4-Dimethylaminoazobenzene			10	313	U093
60-11-7	Dimethylaminoazobenzene			10	X	U093
60-29-7	Ethyl ether			100		U117
60-34-4	Methyl hydrazine	500		10	313	P068
60-35-5	Acetamide			1+	313	
60-41-3	Strychnine, sulfate	100/10,000	1			
60-51-5	Dimethoate	500/10,000		10		P044
60-57-1	Dieldrin			1		P037
61-82-5	Amitrole			10		U011
62-38-4	Phenylmercury acetate	500/10,000		100		P092
62-38-4	Phenylmercuric acetate	500/10,000		100		P092
62-44-2	Phenacetin			100		U187
62-50-0	Ethyl methanesulfonate			1		U119
62-53-3	Aniline	1,000		5,000	313	U012
62-55-5	Thioacetamide			10	313	U218
62-56-6	Thiourea			10	313	U219
62-73-7	Dichlorvos	1,000		10	313	
62-74-8	Sodium fluoroacetate	10/10,000		10		P058
62-74-8	Fluoroacetic acid, sodium salt	10/10,000		10		P058
62-75-9	N-Nitrosodimethylamine	1,000		10	313	P082
62-75-9	Nitrosodimethylamine	1,000		10	X	P082
62-75-9	Methanamine, N-methyl-N-nitroso-	1,000		10	X	P082
63-25-2	Carbaryl			100	313	

+ Listed as hazardous air pollutant under section 112(b) of the Clean Air Act; statutory RQ of one pound applies until RQs are adjusted.

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
64-00-6	Phenol, 3-(1-methylethyl)-, methylcarbamat	500/10,000	1			
64-18-6	Formic acid			5,000		U123
64-19-7	Acetic acid			5,000		
64-67-5	Diethyl sulfate			1+	313	
64-86-8	Colchicine	10/10,000	1			
65-30-5	Nicotine sulfate	100/10,000	1			
65-85-0	Benzoic acid			5,000		
66-75-1	Uracil mustard			10		U237
66-81-9	Cycloheximide	100/10,000	1			
67-56-1	Methanol			5,000	313	U154
67-63-0	Isopropyl alcohol (mfg-strong acid process				313	
67-64-1	Acetone			5,000	313	U002
67-66-3	Chloroform	10,000		10	313	U044
67-72-1	Hexachloroethane			100	313	U131
68-12-2	Dimethylformamide			1+		
68-76-8	Triaziquone				313	
70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-			10		U163
70-30-4	Hexachlorophene			100		U132
70-69-9	Propiophenone, 4'-amino	100/10,000	1			
71-36-3	n-Butyl alcohol			5,000	313	U031
71-43-2	Benzene			10	313	U019
71-55-6	1,1,1-Trichloroethane			1,000	313	U226
71-55-6	Methyl chloroform			1,000	X	U226
71-63-6	Digitoxin	100/10,000	1			
72-20-8	Endrin	500/10,000		1		P051
72-43-5	Methoxychlor			1	313	U247
72-54-8	DDD			1		U060
72-55-9	DDE			1		
72-57-1	Trypan blue			10		U236
74-83-9	Bromomethane	1,000		1,000	313	U029
74-83-9	Methyl bromide	1,000		1,000	X	U029
74-85-1	Ethylene				313	
74-87-3	Chloromethane			100	313	U045
74-87-3	Methyl chloride			100	X	U045
74-88-4	Methyl iodide			100	313	U138
74-89-5	Monomethylamine			100		
74-90-8	Hydrogen cyanide	100		10	313	P063
74-90-8	Hydrocyanic acid	100		10	X	P063
74-93-1	Methyl mercaptan	500		100		U153
74-93-1	Thiomethanol	500		100		U153

+ Listed as hazardous air pollutant under section 112(b) of the Clear Air Act; statutory RQ of one pound applies until RQs are adjusted.

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
74-95-3	Methylene bromide			1,000	313	U068
75-00-3	Chloroethane			100	313	
75-00-3	Ethyl chloride			100	X	
75-01-4	Vinyl chloride			1	313	U043
75-04-7	Monoethylamine			100		
75-05-8	Acetonitrile			5,000	313	U003
75-07-0	Acetaldehyde			1,000	313	U001
75-09-2	Dichloromethane			1,000	313	U080
75-09-2	Methylene chloride			1,000	X	U080
75-15-0	Carbon disulfide	10,000		100	313	P022
75-20-7	Calcium carbide			10		
75-21-8	Ethylene oxide	1,000		10	313	U115
75-21-8	Oxirane	1,000		10	X	U115
75-25-2	Bromoform			100	313	U225
75-25-2	Tribromomethane			100	X	U225
75-27-4	Dichlorobromomethane			5,000	313	
75-34-3	1,1-Dichloroethane			1,000		U076
75-35-4	Vinylidene chloride			100	313	U078
75-35-4	1,1-Dichloroethylene			100	X	U078
75-36-5	Acetyl chloride			5,000		U006
75-44-5	Phosgene	10		10	313	P095
75-50-3	Trimethylamine			100		
75-55-8	Propyleneimine	10,000		1	313	P067
75-55-8	Aziridine, 2-methyl	10,000		1	X	P067
75-56-9	Propylene oxide	10,000		100	313	
75-60-5	Cacodylic acid			1		U136
75-63-8	Bromotrifluoromethane [Halon 1301]				313	
75-63-8	Halon 1301				X	
75-64-9	tert-Butylamine			1,000		
75-65-0	tert-Butyl alcohol				313	
75-69-4	Trichlorofluoromethane [CFC-11]			5,000	313	U121
75-69-4	CFC-11			5,000	X	U121
75-69-4	Trichloromonofluoromethane			5,000	X	U121
75-71-8	Dichlorodifluoromethane [CFC-12]			5,000	313	U075
75-71-8	CFC-12			5,000	X	U075
75-74-1	Tetramethyllead	100	1			
75-77-4	Trimethylchlorosilane	1,000	1			
75-78-5	Dimethyldichlorosilane	500	1			
75-79-6	Methyltrichlorosilane	500	1			
75-86-5	Acetone cyanohydrin	1,000		10		P069

			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
75-87-6	Acetaldehyde, trichloro-			5,000		U034
75-99-0	2,2-Dichloropropionic acid			5,000		
76-01-7	Pentachloroethane			10		U184
76-02-8	Trichloroacetyl chloride	500	1			
76-13-1	Freon 113				313	
76-14-2	Dichlorotetrafluoroethane [CFC-114]				313	
76-14-2	CFC-114				X	
76-15-3	Monochloropentafluoroethane [CFC-115]				313	
76-15-3	CFC-115				X	
76-44-8	Heptachlor			1	313	P059
77-47-4	Hexachlorocyclopentadiene	100		10	313	U130
77-78-1	Dimethyl sulfate	500		100	313	U103
77-81-6	Tabun	10	1			
78-00-2	Tetraethyl lead	100		10		P110
78-34-2	Dioxathion	500	1			
78-53-5	Amiton	500	1			
78-59-1	Isophorone			5,000		
78-71-7	Oxetane, 3,3-bis(chloromethyl)-	500	1			
78-79-5	Isoprene			100		
78-81-9	iso-Butylamine			1,000		
78-82-0	Isobutyronitrile	1,000	1			
78-83-1	Isobutyl alcohol			5,000		U140
78-84-2	Isobutyraldehyde				313	
78-87-5	1,2-Dichloropropane			1,000	313	U083
78-87-5	Propane 1,2-dichloro-			1,000	X	U083
78-88-6	2,3-Dichloropropene			100	313	
78-92-2	sec-Butyl alcohol				313	
78-93-3	Methyl ethyl ketone			5,000	313	U159
78-93-3	Methyl ethyl ketone (MEK)			5,000	X	U159
78-94-4	Methyl vinyl ketone	10	1			
78-97-7	Lactonitrile	1,000	1			
78-99-9	1,1-Dichloropropane			1,000		
79-00-5	1,1,2-Trichloroethane			100	313	U227
79-01-6	Trichloroethylene			100	313	U228
79-06-1	Acrylamide	1,000/10,000		5,000	313	U007
79-09-4	Propionic acid			5,000		
79-10-7	Acrylic acid			5,000	313	U008
79-11-8	Chloroacetic acid	100/10,000		1+	313	
79-19-6	Thiosemicarbazide	100/10,000		100		P116
79-21-0	Peracetic acid	500	1		313	

+ Listed as hazardous air pollutant under section 112(b) of the Clean Air Act; statutory RQ of one pound applies until RQs are adjusted.

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			Section 304			
		Sec. 302(EHS)	EHS	CERCLA	Sec	RCRA
CAS Number	Chemical Name	TPQ	RQ	RQ	313	Code
79-22-1	Methyl chloroformate	500		1,000		U156
79-31-2	iso-Butyric acid			5,000		
79-34-5	1,1,2,2-Tetrachloroethane			100	313	U209
79-44-7	Dimethylcarbamyl chloride			1	313	U097
79-46-9	2-Nitropropane			10	313	U171
80-05-7	4,4'-Isopropylidenediphenol				313	
80-15-9	Cumene hydroperoxide			10	313	U096
80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-			10	X	U096
80-62-6	Methyl methacrylate			1,000	313	U162
80-63-7	Methyl 2-chloroacrylate	500	1			
81-07-2	Saccharin (manufacturing)			100	313	U202
81-07-2	Saccharin and salts			100		U202
81-81-2	Warfarin	500/10,000		100		P001
81-81-2	Warfarin, & salts, conc.>0.3%			100		P001
81-88-9	C.I. Food Red 15				313	
82-28-0	1-Amino-2-methylanthraquinone				313	
82-66-6	Diphacinone	10/10,000	1			
82-68-8	Quintozene			100	313	U185
82-68-8	Pentachloronitrobenzene			100	X	U185
82-68-8	PCNB			100	X	U185
83-32-9	Acenaphthene			100		
84-66-2	Diethyl phthalate			1,000	313	U088
84-74-2	Dibutyl phthalate			10	313	U069
84-74-2	n-Butyl phthalate			10	X	U069
85-00-7	Diquat			1,000		
85-01-8	Phenanthrene			5,000		
85-44-9	Phthalic anhydride			5,000	313	U190
85-68-7	Butyl benzyl phthalate			100	313	
86-30-6	N-Nitrosodiphenylamine			100	313	
86-50-0	Azinphos-methyl	10/10,000		1		
86-50-0	Guthion	10/10,000		1		
86-73-7	Fluorene			5,000		
86-88-4	Antu	500/10,000		100		P072
86-88-4	Thiourea, 1-naphthalenyl-	500/10,000		100		P072
87-62-7	2,6-Xylidine				313	
87-65-0	2,6-Dichlorophenol			100		U082
87-68-3	Hexachloro-1,3-butadiene			1	313	U128
87-68-3	Hexachlorobutadiene			1	X	U128
87-86-5	Pentachlorophenol			10	313	U242
87-86-5	PCP			10	X	U242

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		Sec. 302(EHS)	Section 304		Sec	RCRA
CAS Number	Chemical Name	TPQ	EHS RQ	CERCLA RQ	313	Code
88-05-1	Aniline, 2,4,6-trimethyl-	500	1			
88-06-2	2,4,6-Trichlorophenol			10	313	U230
88-72-2	o-Nitrotoluene			1,000		
88-75-5	2-Nitrophenol			100	313	
88-85-7	Dinoseb	100/10,000		1,000		P020
88-89-1	Picric acid				313	
90-04-0	o-Anisidine			1+	313	
90-43-7	2-Phenylphenol				313	
90-94-8	Michler's ketone				313	
91-08-7	Toluene-2,6-diisocyanate	100		100	313	
91-20-3	Naphthalene			100	313	U165
91-22-5	Quinoline			5,000	313	
91-58-7	2-Chloronaphthalene			5,000		U047
91-59-8	beta-Naphthylamine			10	313	U168
91-80-5	Methapyrilene			5,000		U155
91-94-1	3,3'-Dichlorobenzidine			1	313	U073
92-52-4	Biphenyl			1+	313	
92-67-1	4-Aminobiphenyl			1+	313	
92-87-5	Benzidine			1	313	U021
92-93-3	4-Nitrobiphenyl			1+	313	
93-72-1	Silvex (2,4,5-TP)			100		U233
93-76-5	2,4,5-T acid			1,000		U232
93-79-8	2,4,5-T esters			1,000		
94-11-1	2,4-D Esters			100		
94-36-0	Benzoyl peroxide				313	
94-58-6	Dihydrosafrole			10		U090
94-59-7	Safrole			100	313	U203
94-75-7	2,4-D			100	313	U240
94-75-7	2,4-D Acid			100	X	U240
94-75-7	2,4-D, salts and esters			100		U240
94-79-1	2,4-D Esters			100		
94-80-4	2,4-D Esters			100		
95-47-6	o-Xylene			1,000	313	U239
95-47-6	Benzene, o-dimethyl-			1,000	X	U239
95-48-7	o-Cresol	1,000/10,000		1,000	313	U052
95-50-1	1,2-Dichlorobenzene			100	313	U070
95-50-1	o-Dichlorobenzene			100	X	U070
95-53-4	o-Toluidine			100	313	U328
95-57-8	2-Chlorophenol			100		U048
95-63-6	1,2,4-Trimethylbenzene				313	

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
95-80-7	2,4-Diaminotoluene			10	313	
95-94-3	1,2,4,5-Tetrachlorobenzene			5,000		U207
95-95-4	2,4,5-Trichlorophenol			10	313	U230
96-09-3	Styrene oxide			1*	313	
96-12-8	1,2-Dibromo-3-chloropropane			1	313	U066
96-12-8	DBCP			1	X	U066
96-33-3	Methyl acrylate				313	
96-45-7	Ethylene thiourea			10	313	U116
97-56-3	C.I. Solvent Yellow 3				313	
97-63-2	Ethyl methacrylate			1,000		U118
98-01-1	Furfural			5,000		U125
98-05-5	Benzenearsonic acid	10/10,000	1			
98-07-7	Benzoic trichloride	100		10	313	U023
98-07-7	Benzotrichloride	100		10	X	U023
98-09-9	Benzenesulfonyl chloride			100		U020
98-13-5	Trichlorophenylsilane	500	1			
98-16-8	Benzenamine, 3-(trifluoromethyl)-	500	1			
98-82-8	Cumene			5,000	313	U055
98-86-2	Acetophenone			5,000		U004
98-87-3	Benzal chloride	500		5,000	313	U017
98-88-4	Benzoyl chloride			1,000	313	
98-95-3	Nitrobenzene	10,000		1,000	313	U169
99-08-1	m-Nitrotoluene			1,000		
99-35-4	1,3,5-Trinitrobenzene			10		U234
99-55-8	5-Nitro-o-toluidine			100		U181
99-59-2	5-Nitro-o-anisidine				313	
99-65-0	m-Dinitrobenzene			100	313	
99-98-9	Dimethyl-p-phenylenediamine	10/10,000	1			
99-99-0	p-Nitrotoluene			1,000		
100-01-6	p-Nitroaniline			5,000		P077
100-02-7	4-Nitrophenol			100	313	U170
100-02-7	p-Nitrophenol			100	X	U170
100-14-1	Benzene, 1-(chloromethyl)-4-nitro-	500/10,000	1			
100-25-4	p-Dinitrobenzene			100	313	
100-41-4	Ethylbenzene			1,000	313	
100-42-5	Styrene			1,000	313	
100-44-7	Benzyl chloride	500		100	313	P028
100-47-0	Benzonitrile			5,000		
100-75-4	N-Nitrosopiperidine			10	313	U179
101-14-4	4,4'-Methylenebis(2-chloroaniline)			10	313	U158

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
101-14-4	MBOCA			10	X	U158
101-55-3	4-Bromophenyl phenyl ether			100		U030
101-61-1	4,4'-Methylenebis(N,N-dimethyl)benzenamine				313	
101-68-8	Methylenebis(phenylisocyanate)			1+	313	
101-68-8	MBI			1+	X	
101-77-9	4,4'-Methylenedianiline			1+	313	
101-80-4	4,4'-Diaminodiphenyl ether				313	
102-36-3	Isocyanic acid, 3,4-dichlorophenyl ester	500/10,000	1			
103-23-1	Bis(2-ethylhexyl) adipate				313	
103-85-5	Phenylthiourea	100/10,000		100		P093
104-94-9	p-Anisidine				313	
105-46-4	sec-Butyl acetate			5,000		
105-60-2	Caprolactam			1+		
105-67-9	2,4-Dimethylphenol			100	313	U101
106-42-3	p-Xylene			1,000	313	U239
106-42-3	Benzene, p-dimethyl-			1,000	*X	U239
106-44-5	p-Cresol			1,000	313	U052
106-46-7	1,4-Dichlorobenzene			100	313	U072
106-47-8	p-Chloroaniline			1,000		P024
106-49-0	p-Toluidine			100		U353
106-50-3	p-Phenylenediamine			1+	313	
106-51-4	Quinone			10	313	U197
106-51-4	p-Benzoquinone			10	X	U197
106-88-7	1,2-Butylene oxide			1+	313	
106-89-8	Epichlorohydrin	1,000		100	313	U041
106-93-4	1,2-Dibromoethane			1	313	U067
106-93-4	Ethylene dibromide			1	X	U067
106-96-7	Propargyl bromide	10	1			
106-99-0	1,3-Butadiene			1+	313	
107-02-8	Acrolein	500		1	313	P003
107-05-1	Allyl chloride			1,000	313	
107-06-2	1,2-Dichloroethane			100	313	U077
107-06-2	Ethylene dichloride			100	X	U077
107-07-3	Chloroethanol	500	1			
107-10-8	n-Propylamine			5,000		U194
107-11-9	Allylamine	500	1			
107-12-0	Propionitrile	500		10		P101
107-12-0	Ethyl cyanide	500		10		P101
107-13-1	Acrylonitrile	10,000		100	313	U009
107-15-3	Ethylenediamine	10,000		5,000		

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
107-16-4	Formaldehyde cyanohydrin	1,000	1			
107-18-6	Allyl alcohol	1,000		100	313	P005
107-19-7	Propargyl alcohol			1,000		P102
107-20-0	Chloroacetaldehyde			1,000		P023
107-21-1	Ethylene glycol			1+	313	
107-30-2	Chloromethyl methyl ether	100		10	313	U046
107-44-8	Sarin	10	1			
107-49-3	Tepp	100		10		P111
107-49-3	Tetraethyl pyrophosphate	100		10		P111
107-92-6	Butyric acid			5,000		
108-05-4	Vinyl acetate	1,000		5,000	313	
108-05-4	Vinyl acetate monomer	1,000		5,000	X	
108-10-1	Methyl isobutyl ketone			5,000	313	U161
108-23-6	Isopropyl chloroformate	1,000	1			
108-24-7	Acetic anhydride			5,000		
108-31-6	Maleic anhydride			5,000	313	U147
108-38-3	m-Xylene			1,000	313	U239
108-38-3	Benzene, m-dimethyl-			1,000	X	U239
108-39-4	m-Cresol			1,000	313	U052
108-46-3	Resorcinol			5,000		U201
108-60-1	Bis(2-chloro-1-methylethyl)ether			1,000	313	U027
108-60-1	Dichloroisopropyl ether			1,000	X	U027
108-88-3	Toluene			1,000	313	U220
108-90-7	Chlorobenzene			100	313	U037
108-91-8	Cyclohexylamine	10,000	1			
108-94-1	Cyclohexanone			5,000		U057
108-95-2	Phenol	500/10,000		1,000	313	U188
108-98-5	Thiophenol	500		100		P014
108-98-5	Benzenethiol	500		100		P014
109-06-8	2-Picoline			5,000		U191
109-61-5	Propyl chloroformate	500	1			
109-73-9	Butylamine			1,000		
109-77-3	Malononitrile	500/10,000		1,000		U149
109-86-4	2-Methoxyethanol				313	
109-89-7	Diethylamine			1,000		
109-99-9	Furan, tetrahydro-			1,000		U213
110-00-9	Furan	500		100		U124
110-16-7	Maleic acid			5,000		
110-17-8	Fumaric acid			5,000		
110-19-0	iso-Butyl acetate			5,000		

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
110-54-3	Hexane			1*		
110-57-6	Trans-1,4-dichlorobutene	500	1			
110-75-8	2-Chloroethyl vinyl ether			1,000		U042
110-80-5	2-Ethoxyethanol			1,000	313	U359
110-80-5	Ethanol, 2-ethoxy-			1,000	X	U359
110-82-7	Cyclohexane			1,000	313	U056
110-86-1	Pyridine			1,000	313	U196
110-89-4	Piperidine	1,000	1			
111-42-2	Diethanolamine			1*	313	
111-44-4	Bis(2-chloroethyl) ether	10,000		10	313	U025
111-44-4	Dichloroethyl ether	10,000		10	X	U025
111-54-6	Ethylenebisdithiocarbamic acid, salts & es			5,000		U114
111-69-3	Adiponitrile	1,000	1			
111-91-1	Bis(2-chloroethoxy) methane			1,000		U024
114-26-1	Propoxur			1*	313	
115-02-6	Azaserine			1		U015
115-07-1	Propylene (Propene)				313	
115-21-9	Trichloroethylsilane	500	1			
115-26-4	Dimefox	500	1			
115-29-7	Endosulfan	10/10,000		1		P050
115-32-2	Dicofol			10	313	
115-90-2	Fensulfothion	500	1			
116-06-3	Aldicarb	100/10,000		1		P070
117-79-3	2-Aminoanthraquinone				313	
117-80-6	Dichlone			1		
117-81-7	Di(2-ethylhexyl) phthalate			100	313	U028
117-81-7	Bis(2-ethylhexyl)phthalate			100	X	U028
117-81-7	DEHP			100	X	U028
117-84-0	n-Dioctylphthalate			5,000	313	U107
117-84-0	Di-n-octyl phthalate			5,000	X	U107
118-74-1	Hexachlorobenzene			10	313	U127
119-38-0	Isopropylmethylpyrazolyl dimethylcarbamate	500	1			
119-90-4	3,3'-Dimethoxybenzidine			100	313	U091
119-93-7	3,3'-Dimethylbenzidine			10	313	U095
119-93-7	o-Toluidine			10	X	U095
120-12-7	Anthracene			5,000	313	
120-58-1	Isosafrole			100	313	U141
120-71-8	p-Cresidine				313	
120-80-9	Catechol			1*	313	
120-82-1	1,2,4-Trichlorobenzene			100	313	

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
120-83-2	2,4-Dichlorophenol			100	313	U081
121-14-2	2,4-Dinitrotoluene			10	313	U105
121-21-1	Pyrethrins			1		
121-29-9	Pyrethrins			1		
121-44-8	Triethylamine			5,000		
121-69-7	N,N-Dimethylaniline			1+	313	
121-75-5	Malathion			100		
122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-			5,000		P046
122-14-5	Fenitrothion	500	1			
122-66-7	1,2-Diphenylhydrazine			10	313	U109
122-66-7	Hydrazine, 1,2-diphenyl-			10	X	U109
122-66-7	Hydrazobenzene			10	X	U109
123-31-9	Hydroquinone	500/10,000		1+	313	
123-33-1	Maleic hydrazide			5,000		U148
123-38-6	Propionaldehyde			1+	313	
123-62-6	Propionic anhydride			5,000		
123-63-7	Paraldehyde			1,000		U182
123-72-8	Butyraldehyde				313	
123-73-9	Crotonaldehyde, (E)-	1,000		100		U053
123-86-4	Butyl acetate			5,000		
123-91-1	1,4-Dioxane			100	313	U108
123-92-2	iso-Amyl acetate			5,000		
124-04-9	Adipic acid			5,000		
124-40-3	Dimethylamine			1,000		U092
124-41-4	Sodium methylate			1,000		
124-48-1	Chlorodibromomethane			100		
124-65-2	Sodium cacodylate	100/10,000	1			
124-73-2	Dibromotetrafluoroethane (Halon 2402)				313	
124-73-2	Halon 2402				X	
124-87-8	Picrotoxin	500/10,000	1			
126-72-7	Tris(2,3-dibromopropyl) phosphate			10	313	U235
126-98-7	Methacrylonitrile	500		1,000		U152
126-99-8	Chloroprene			1+	313	
127-18-4	Tetrachloroethylene			100	313	U210
127-18-4	Perchloroethylene			100	X	U210
127-82-2	Zinc phenolsulfonate			5,000		
128-66-5	C.I. Vat Yellow 4				313	
129-00-0	Pyrene	1,000/10,000		5,000		
129-06-6	Warfarin sodium	100/10,000	1			
130-15-4	1,4-Naphthoquinone			5,000		U166

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
131-11-3	Dimethyl phthalate			5,000	313	U102
131-74-8	Ammonium picrate			10		P009
131-89-5	2-Cyclohexyl-4,6-Dinitrophenol			100		P034
132-64-9	Dibenzofuran			1*	313	
133-06-2	Captan			10	313	
133-90-4	Chloramben			1*	313	
134-29-2	o-Anisidine hydrochloride				313	
134-32-7	alpha-Naphthylamine			100	313	U167
135-20-6	Cupferron				313	
137-26-8	Thiram			10		U244
139-13-9	Nitrilotriacetic acid				313	
139-65-1	4,4'-Thiodianiline				313	
140-29-4	Benzyl cyanide	500	1			
140-76-1	Pyridine, 2-methyl-5-vinyl-	500	1			
140-88-5	Ethyl acrylate			1,000	313	U113
141-32-2	Butyl acrylate				313	
141-66-2	Dicrotophos	100	1			
141-78-6	Ethyl acetate			5,000		U112
142-28-9	1,3-Dichloropropane			5,000		
142-71-2	Cupric acetate			100		
142-84-7	Dipropylamine			5,000		U110
143-33-9	Sodium cyanide (Na(CN))	100		10		P106
143-50-0	Kepone			1		U142
144-49-0	Fluoroacetic acid	10/10,000	1			
145-73-3	Endothall			1,000		P088
148-82-3	Melphalan			1		U150
149-74-6	Dichloromethylphenylsilane	1,000	1			
151-38-2	Methoxyethylmercuric acetate	500/10,000	1			
151-50-8	Potassium cyanide	100		10		P098
151-56-4	Ethyleneimine	500		1	313	P054
151-56-4	Aziridine	500		1	X	P054
152-16-9	Diphosphoramide, octamethyl-	100		100		P085
156-10-5	p-Nitrosodiphenylamine				313	
156-60-5	1,2-Dichloroethylene			1,000		U079
156-62-7	Calcium cyanamide			1*	313	
189-55-9	Dibenz[a,i]pyrene			10		U064
191-24-2	Benzo[ghi]perylene			5,000		
193-39-5	Indeno(1,2,3-cd)pyrene			100		U137
205-99-2	Benzo[b]fluoranthene			1		
206-44-0	Fluoranthene			100		U120

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
207-08-9	Benzo(k)fluoranthene			5,000		
208-96-8	Acenaphthylene			5,000		
218-01-9	Chrysene			100		U050
225-51-4	Benz[c]acridine			100		U016
297-78-9	Isobenzan	100/10,000	1			
297-97-2	Thionazin	500		100		P040
297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate	500		100		P040
298-00-0	Parathion-methyl	100/10,000		100		P071
298-00-0	Methyl parathion	100/10,000		100		P071
298-02-2	Phorate	10		10		P094
298-04-4	Disulfoton	500		1		P039
300-62-9	Amphetamine	1,000	1			
300-76-5	Naled			10		
301-04-2	Lead acetate			5,000		U144
302-01-2	Hydrazine	1,000		1	313	U133
303-34-4	Lasiocarpine			10		U143
305-03-3	Chlorambucil			10		U035
309-00-2	Aldrin	500/10,000		1	313	P004
311-45-5	Diethyl-p-nitrophenyl phosphate			100		P041
315-18-4	Mexacarbate	500/10,000		1,000		
316-42-7	Emetine, dihydrochloride	1/10,000	1			
319-84-6	alpha-BHC			10		
319-85-7	beta-BHC			1		
319-86-8	delta-BHC			1		
327-98-0	Trichloronate	500	1			
329-71-5	2,5-Dinitrophenol			10		
330-54-1	Diuron			100		
333-41-5	Diazinon			1		
334-88-3	Diazomethane			1+	313	
353-42-4	Boron trifluoride compound with methyl eth	1,000	1			
353-50-4	Carbonic difluoride			1,000		U033
353-59-3	Bromochlorodifluoromethane (Halon 1211)				313	
353-59-3	Halon 1211				X	
357-57-3	Brucine			100		P018
359-06-8	Fluoroacetyl chloride	10	1			
371-62-0	Ethylene fluorohydrin	10	1			
379-79-3	Ergotamine tartrate	500/10,000	1			
460-19-5	Cyanogen			100		P031
463-58-1	Carbonyl sulfide			1+	313	
465-73-6	Isodrin	100/10,000		1		P060

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
470-90-6	Chlorfenvinfos	500	1			
492-80-8	C.I. Solvent Yellow 34			100	313	U014
492-80-8	Auramine			100	X	U014
494-03-1	Chlornaphazine			100		U026
496-72-0	Diaminotoluene			10		
502-39-6	Methylmercuric dicyanamide	500/10,000	1			
504-24-5	Pyridine, 4-amino-	500/10,000		1,000		P008
504-24-5	4-Aminopyridine	500/10,000		1,000		P008
504-60-9	1,3-Pentadiene			100		U186
505-60-2	Mustard gas	500	1		313	
506-61-6	Potassium silver cyanide	500		1		P099
506-64-9	Silver cyanide			1		P104
506-68-3	Cyanogen bromide	500/10,000		1,000		U246
506-77-4	Cyanogen chloride			10		P033
506-78-5	Cyanogen iodide	1,000/10,000	1			
506-87-6	Ammonium carbonate			5,000		
506-96-7	Acetyl bromide			5,000		
509-14-8	Tetranitromethane	500		10		P112
510-15-6	Chlorobenzilate			10	313	U038
513-49-5	sec-Butylamine			1,000		
514-73-8	Dithiazanine iodide	500/10,000	1			
528-29-0	o-Dinitrobenzene			100	313	
532-27-4	2-Chloroacetophenone			1+	313	
534-07-6	Bis(chloromethyl) ketone	10/10,000	1			
534-52-1	Dinitrocresol	10/10,000		10		P047
534-52-1	4,6-Dinitro-o-cresol	10/10,000		10	313	P047
534-52-1	4,6-Dinitro-o-cresol and salts			10		P047
535-89-7	Crimidine	100/10,000	1			
538-07-8	Ethylbis(2-chloroethyl)amine	500	1			
540-59-0	1,2-Dichloroethylene				313	
540-73-8	Hydrazine, 1,2-dimethyl-			1		U099
540-84-1	2,2,4-Trimethylpentane			1+		
540-88-5	tert-Butyl acetate			5,000		
541-09-3	Uranyl acetate			100		
541-25-3	Lewisite	10	1			
541-41-3	Ethyl chloroformate				313	
541-53-7	Dithiobiuret	100/10,000		100		P049
541-73-1	1,3-Dichlorobenzene			100	313	U071
542-62-1	Barium cyanide			10		P013
542-75-6	1,3-Dichloropropylene			100	313	U084

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
542-75-6	1,3-Dichloropropene			100	X	U084
542-76-7	Propionitrile, 3-chloro-	1,000		1,000		P027
542-76-7	3-Chloropropionitrile	1,000		1,000		P027
542-88-1	Bis(chloromethyl) ether	100		10	313	P016
542-88-1	Chloromethyl ether	100		10	X	P016
542-88-1	Dichloromethyl ether	100		10	X	P016
542-90-5	Ethylthiocyanate	10,000	1			
543-90-8	Cadmium acetate			10		
544-18-3	Cobaltous formate			1,000		
544-92-3	Copper cyanide			10		P029
554-84-7	m-Nitrophenol			100		
555-77-1	Tris(2-chloroethyl)amine	100	1			
556-61-6	Methyl isothiocyanate	500	1			
556-64-9	Methyl thiocyanate	10,000	1			
557-19-7	Nickel cyanide			10		P074
557-21-1	Zinc cyanide			10		P121
557-34-6	Zinc acetate			1,000		
557-41-5	Zinc formate			1,000		
558-25-8	Methanesulfonyl fluoride	1,000	1			
563-12-2	Ethion	1,000		10		
563-41-7	Semicarbazide hydrochloride	1,000/10,000	1			
563-68-8	Thallium(I) acetate			100		U214
569-64-2	C.I. Basic Green 4				313	
573-56-8	2,6-Dinitrophenol			10		
584-84-9	Toluene-2,4-diisocyanate	500		100	313	
591-08-2	1-Acetyl-2-thiourea			1,000		P002
592-01-8	Calcium cyanide			10		P021
592-04-1	Mercuric cyanide			1		
592-85-8	Mercuric thiocyanate			10		
592-87-0	Lead thiocyanate			100		
593-60-2	Vinyl bromide			1+	313	
594-42-3	Perchloromethylmercaptan	500		100		
594-42-3	Trichloromethanesulfonyl chloride	500		100		
597-64-8	Tetraethyltin	100	1			
598-31-2	Bromoacetone			1,000		P017
606-20-2	2,6-Dinitrotoluene			100	313	U106
608-93-5	Pentachlorobenzene			10		U183
609-19-8	3,4,5-Trichlorophenol			10		
610-39-9	3,4-Dinitrotoluene			10		
614-78-8	Thiourea, (2-methylphenyl)-	500/10,000	1			

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
615-05-4	2,4-Diaminoanisole				313	
615-53-2	N-Nitroso-N-methylurethane			1		U178
621-64-7	N-Nitrosodi-n-propylamine			10	313	U111
621-64-7	Di-n-propylnitrosamine			10	X	U111
624-83-9	Methyl isocyanate	500		1	313	P064
625-16-1	tert-Amyl acetate			5,000		
626-38-0	sec-Amyl acetate			5,000		
627-11-2	Chloroethyl chloroformate	1,000	1			
628-63-7	Amyl acetate			5,000		
628-86-4	Mercury fulminate			10		P065
630-10-4	Selenourea			1,000		P103
630-20-6	Ethane, 1,1,1,2-tetrachloro-			100		U208
630-60-4	Ouabain	100/10,000	1			
631-61-8	Ammonium acetate			5,000		
636-21-5	o-Toluidine hydrochloride			100	313	U222
639-58-7	Triphenyltin chloride	500/10,000	1			
640-19-7	Fluoroacetamide	100/10,000		100		P057
644-64-4	Dimetilan	500/10,000	1			
675-14-9	Cyanuric fluoride	100	1			
676-97-1	Methyl phosphonic dichloride	100	1			
680-31-9	Hexamethylphosphoramide			1+	313	
684-93-5	N-Nitroso-N-methylurea			1	313	U177
692-42-2	Diethylarsine			1		P038
696-28-6	Phenyl dichloroarsine	500		1		P036
696-28-6	Dichlorophenylarsine	500		1		P036
732-11-6	Phosmet	10/10,000	1			
757-58-4	Hexaethyl tetraphosphate			100		P062
759-73-9	N-Nitroso-N-ethylurea			1	313	U176
760-93-0	Methacrylic anhydride	500	1			
764-41-0	2-Butene, 1,4-dichloro-			1		U074
765-34-4	Glycidylaldehyde			10		U126
786-19-6	Carbophenothion	500	1			
814-49-3	Diethyl chlorophosphate	500	1			
814-68-6	Acrylyl chloride	100	1			
815-82-7	Cupric tartrate			100		
822-06-0	Hexamethylene-1,6-diisocyanate			1+		
823-40-5	Diaminotoluene			10		
824-11-3	Trimethylolpropane phosphite	100/10,000	1			
842-07-9	C.I. Solvent Yellow 14				313	
900-95-8	Stannane, acetoxytriphenyl-	500/10,000	1			

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
919-86-8	Demeton-S-methyl	500	1			
920-46-7	Methacryloyl chloride	100	1			
924-16-3	N-Nitrosodi-n-butylamine			10	313	U172
930-55-2	N-Nitrosopyrrolidine			1		U180
933-75-5	2,3,6-Trichlorophenol			10		
933-78-8	2,3,5-Trichlorophenol			10		
944-22-9	Fonofos	500	1			
947-02-4	Phosfolan	100/10,000	1			
950-10-7	Mephosfolan	500	1			
950-37-8	Methidathion	500/10,000	1			
959-98-8	alpha - Endosulfan			1		
961-11-5	Tetrachlorvinphos				313	
989-38-8	C.I. Basic Red 1				313	
991-42-4	Norbormide	100/10,000	1			
998-30-1	Triethoxysilane	500	1			
999-81-5	Chlormequat chloride	100/10,000	1			
1024-57-3	Heptachlor epoxide			1		
1031-07-8	Endosulfan sulfate			1		
1031-47-6	Triamiphos	500/10,000	1			
1066-30-4	Chromic acetate			1,000		
1066-33-7	Ammonium bicarbonate			5,000		
1066-45-1	Trimethyltin chloride	500/10,000	1			
1072-35-1	Lead stearate			5,000		
1111-78-0	Ammonium carbamate			5,000		
1116-54-7	N-Nitrosodiethanolamine			1		U173
1120-71-4	Propane sultone			10	313	U193
1120-71-4	1,3-Propane sultone			10	X	U193
1122-60-7	Nitrocyclohexane	500	1			
1124-33-0	Pyridine, 4-nitro-, 1-oxide	500/10,000	1			
1129-41-5	Metolcarb	100/10,000	1			
1163-19-5	Decabromodiphenyl oxide				313	
1185-57-5	Ferric ammonium citrate			1,000		
1194-65-6	Dichlobenil			100		
1300-71-6	Xylenol			1,000		
1303-28-2	Arsenic pentoxide	100/10,000		1		P011
1303-32-8	Arsenic disulfide			1		
1303-33-9	Arsenic trisulfide			1		
1306-19-0	Cadmium oxide	100/10,000	1			
1309-64-4	Antimony trioxide			1,000		
1310-58-3	Potassium hydroxide			1,000		

			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
1310-73-2	Sodium hydroxide			1,000		
1313-27-5	Molybdenum trioxide				313	
1314-20-1	Thorium dioxide				313	
1314-32-5	Thallic oxide			100		P113
1314-56-3	Phosphorus pentoxide	10	1			
1314-62-1	Vanadium pentoxide	100/10,000		1,000		P120
1314-80-3	Sulfur phosphide			100		U189
1314-84-7	Zinc phosphide	500		100		P122
1314-84-7	Zinc phosphide (conc. <= 10%)	500		100		U249
1314-84-7	Zinc phosphide (conc. > 10%)	500		100		P122
1314-87-0	Lead sulfide			5,000		
1319-72-8	2,4,5-T amines			5,000		
1319-77-3	Cresol (mixed isomers)			1,000	313	U052
1320-18-9	2,4-D Esters			100		
1321-12-6	Nitrotoluene			1,000		
1327-52-2	Arsenic acid			1		P010
1327-53-3	Arsenous oxide	100/10,000		1		P012
1327-53-3	Arsenic trioxide	100/10,000		1		P012
1330-20-7	Xylene (mixed isomers)			1,000	313	U239
1332-07-6	Zinc borate			1,000		
1332-21-4	Asbestos (friable)			1	313	
1333-83-1	Sodium bifluoride			100		
1335-32-6	Lead subacetate			100		U146
1335-87-1	Hexachloronaphthalene				313	
1336-21-6	Ammonium hydroxide			1,000		
1336-36-3	Polychlorinated biphenyls			1	313	
1336-36-3	PCBs			1	X	
1338-23-4	Methyl ethyl ketone peroxide			10		U160
1338-24-5	Naphthenic acid			100		
1341-49-7	Ammonium bifluoride			100		
1344-28-1	Aluminum oxide (fibrous forms)				313	
1397-94-0	Antimycin A	1,000/10,000	1			
1420-07-1	Dinoterb	500/10,000	1			
1464-53-5	Diepoxybutane	500		10	313	U085
1464-53-5	2,2'-Bioxirane	500		10	X	U085
1558-25-4	Trichloro(chloromethyl)silane	100	1			
1563-66-2	Carbofuran	10/10,000		10		
1582-09-8	Trifluralin			1+	313	
1600-27-7	Mercuric acetate	500/10,000	1			
1615-80-1	Hydrazine, 1,2-diethyl-			10		U086

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
1622-32-8	Ethanesulfonyl chloride, 2-chloro-	500	1			
1634-04-4	Methyl tert-butyl ether			1+	313	
1642-54-2	Diethylcarbamazine citrate	100/10,000	1			
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)			1		
1752-30-3	Acetone thiosemicarbazide	1,000/10,000	1			
1762-95-4	Ammonium thiocyanate			5,000		
1836-75-5	Nitrofen				313	
1863-63-4	Ammonium benzoate			5,000		
1888-71-7	Hexachloropropene			1,000		U243
1897-45-6	Chlorothalonil				313	
1910-42-5	Paraquat	10/10,000	1			
1918-00-9	Dicamba			1,000		
1928-38-7	2,4-D Esters			100		
1928-47-8	2,4,5-T esters			1,000		
1928-61-6	2,4-D Esters			100		
1929-73-3	2,4-D Esters			100		
1937-37-7	C.I. Direct Black 38				313	
1982-47-4	Chloroxuron	500/10,000	1			
2001-95-8	Valinomycin	1,000/10,000	1			
2008-46-0	2,4,5-T amines			5,000		
2032-65-7	Methiocarb	500/10,000		10		
2032-65-7	Mercaptodimethur	500/10,000		10		
2074-50-2	Paraquat methosulfate	10/10,000	1			
2097-19-0	Phenylsilatrane	100/10,000	1			
2104-64-5	EPN	100/10,000	1			
2164-17-2	Fluometuron				313	
2223-93-0	Cadmium stearate	1,000/10,000	1			
2231-57-4	Thiocarbazide	1,000/10,000	1			
2234-13-1	Octachloronaphthalene				313	
2238-07-5	Diglycidyl ether	1,000	1			
2275-18-5	Prothoate	100/10,000	1			
2303-16-4	Diallate			100	313	U062
2312-35-8	Propargite			10		
2497-07-6	Oxydisulfoton	500	1			
2524-03-0	Dimethyl phosphorochloridothioate	500	1			
2540-82-1	Formothion	100	1			
2545-59-7	2,4,5-T esters			1,000		
2570-26-5	Pentadecylamine	100/10,000	1			
2587-90-8	Phosphorothioic acid, O,O-dimethyl-S-(2-(m	500	1			
2602-46-2	C.I. Direct Blue 6				313	

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			Section 304			
		Sec. 302(EHS)	EHS	CERCLA	Sec	RCRA
CAS Number	Chemical Name	TPQ	RQ	RQ	313	Code
2631-37-0	Promecarb	500/10,000	1			
2636-26-2	Cyanophos	1,000	1			
2642-71-9	Azinphos-ethyl	100/10,000	1			
2665-30-7	Phosphonothioic acid, methyl-, O-(4-nitrop	500	1			
2703-13-1	Phosphonothioic acid, methyl-, O-ethyl O-(	500	1			
2757-18-8	Thallous malonate	100/10,000	1			
2763-96-4	Muscimol	500/10,000		1,000		P007
2763-96-4	5-(Aminomethyl)-3-isoxazolol	500/10,000		1,000		P007
2764-72-9	Diquat			1,000		
2778-04-3	Endothion	500/10,000	1			
2832-40-8	C.I. Disperse Yellow 3				313	
2921-88-2	Chlorpyrifos			1		
2944-67-4	Ferric ammonium oxalate			1,000		
2971-38-2	2,4-D Esters			100		
3012-65-5	Ammonium citrate, dibasic			5,000		
3037-72-7	Silane, (4-aminobutyl)diethoxymethyl-	1,000	1			
3118-97-6	C.I. Solvent Orange 7				313	
3164-29-2	Ammonium tartrate			5,000		
3165-93-3	4-Chloro-o-toluidine, hydrochloride			100		U049
3251-23-8	Cupric nitrate			100		
3254-63-5	Phosphoric acid, dimethyl 4-(methylthio) p	500	1			
3288-58-2	O,O-Diethyl S-methyl dithiophosphate			5,000		U087
3486-35-9	Zinc carbonate			1,000		
3547-04-4	DDE			1+		
3569-57-1	Sulfoxide, 3-chloropropyl octyl	500	1			
3615-21-2	Benzimidazole, 4,5-dichloro-2-(trifluorom	500/10,000	1			
3689-24-5	Sulfotep	500		100		P109
3689-24-5	Tetraethyldithiopyrophosphate	500		100		P109
3691-35-8	Chlorophacinone	100/10,000	1			
3734-97-2	Amiton oxalate	100/10,000	1			
3735-23-7	Methyl phenkapton	500	1			
3761-53-3	C.I. Food Red 5				313	
3813-14-7	2,4,5-T amines			5,000		
3878-19-1	Fuberidazole	100/10,000	1			
4044-65-9	Bitoscanate	500/10,000	1			
4098-71-9	Isophorone diisocyanate	100	1			
4104-14-7	Phosacetim	100/10,000	1			
4170-30-3	Crotonaldehyde	1,000		100		U053
4301-50-2	Fluenetil	100/10,000	1			
4418-66-0	Phenol, 2,2'-thiobis[4-chloro-6-methyl-	100/10,000	1			

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
4549-40-0	N-Nitrosomethylvinylamine			10	313	P084
4680-78-8	C.I. Acid Green 3				313	
4835-11-4	Hexamethylenediamine, N,N'-dibutyl-	500	1			
5344-82-1	Thiourea, (2-chlorophenyl)-	100/10,000		100		P026
5836-29-3	Coumatetralyl	500/10,000	1			
5893-66-3	Cupric oxalate			100		
5972-73-6	Ammonium oxalate			5,000		
6009-70-7	Ammonium oxalate			5,000		
6369-96-6	2,4,5-T amines			5,000		
6369-97-7	2,4,5-T amines			5,000		
6484-52-2	Ammonium nitrate (solution)				313	
6533-73-9	Thallous carbonate	100/10,000		100		U215
6533-73-9	Thallium(I) carbonate	100/10,000		100		U215
6923-22-4	Monocrotophos	10/10,000	1			
7005-72-3	4-Chlorophenyl phenyl ether			5,000		
7421-93-4	Endrin aldehyde			1		
7428-48-0	Lead stearate			5,000		
7429-90-5	Aluminum (fume or dust)				313	
7439-92-1	Lead			1*	313	
7439-96-5	Manganese				313	
7439-97-6	Mercury			1	313	U151
7440-02-0	Nickel			100*	313	
7440-22-4	Silver			1,000*	313	
7440-23-5	Sodium			10		
7440-28-0	Thallium			1,000*	313	
7440-36-0	Antimony			5,000*	313	
7440-38-2	Arsenic			1*	313	
7440-39-3	Barium				313	
7440-41-7	Beryllium			10*	313	P015
7440-43-9	Cadmium			10*	313	
7440-47-3	Chromium			5,000*	313	
7440-48-4	Cobalt				313	
7440-50-8	Copper			5,000*	313	
7440-62-2	Vanadium (fume or dust)				313	
7440-66-6	Zinc (fume or dust)			1,000*	313	
7440-66-6	Zinc			1,000*		
7446-08-4	Selenium dioxide			10		
7446-09-5	Sulfur dioxide	500	1			
7446-11-9	Sulfur trioxide	100	1			
7446-14-2	Lead sulfate			100		

* No reporting of releases is required if the diameter of the pieces of the solid metal released is equal to or exceeds 100 micrometers (0.004 inches).

CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
7446-18-6	Thallous sulfate	100/10,000		100		P115
7446-18-6	Thallium(I) sulfate	100/10,000		100		P115
7446-27-7	Lead phosphate			1		U145
7447-39-4	Cupric chloride			10		
7487-94-7	Mercuric chloride	500/10,000	1			
7488-56-4	Selenium sulfide			10		U205
7550-45-0	Titanium tetrachloride	100		1*	313	
7558-79-4	Sodium phosphate, dibasic			5,000		
7580-67-8	Lithium hydride	100	1			
7601-54-9	Sodium phosphate, tribasic			5,000		
7631-89-2	Sodium arsenate	1,000/10,000		1		
7631-90-5	Sodium bisulfite			5,000		
7632-00-0	Sodium nitrite			100		
7637-07-2	Boron trifluoride	500	1			
7645-25-2	Lead arsenate			1		
7646-85-7	Zinc chloride			1,000		
7647-01-0	Hydrochloric acid			5,000	313	
7647-01-0	Hydrogen chloride (gas only)	500		5,000	X	
7647-18-9	Antimony pentachloride			1,000		
7664-38-2	Phosphoric acid			5,000	313	
7664-39-3	Hydrogen fluoride	100		100	313	U134
7664-39-3	Hydrofluoric acid	100		100	X	U134
7664-41-7	Ammonia	500		100	313	
7664-93-9	Sulfuric acid	1,000		1,000	313	
7681-49-4	Sodium fluoride			1,000		
7681-52-9	Sodium hypochlorite			100		
7697-37-2	Nitric acid	1,000		1,000	313	
7699-45-8	Zinc bromide			1,000		
7705-08-0	Ferric chloride			1,000		
7718-54-9	Nickel chloride			100		
7719-12-2	Phosphorus trichloride	1,000		1,000		
7720-78-7	Ferrous sulfate			1,000		
7722-64-7	Potassium permanganate			100		
7722-84-1	Hydrogen peroxide (Conc.> 52%)	1,000	1			
7723-14-0	Phosphorus (yellow or white)	100		1	313	
7723-14-0	Phosphorus	100		1		
7726-95-6	Bromine	500	1			
7733-02-0	Zinc sulfate			1,000		
7738-94-5	Chromic acid			10		
7758-29-4	Sodium phosphate, tribasic			5,000		

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
7758-94-3	Ferrous chloride			100		
7758-95-4	Lead chloride			100		
7758-98-7	Cupric sulfate			10		
7761-88-8	Silver nitrate			1		
7773-06-0	Ammonium sulfamate			5,000		
7775-11-3	Sodium chromate			10		
7778-39-4	Arsenic acid			1		P010
7778-44-1	Calcium arsenate	500/10,000		1		
7778-50-9	Potassium bichromate			10		
7778-54-3	Calcium hypochlorite			10		
7779-86-4	Zinc hydrosulfite			1,000		
7779-88-6	Zinc nitrate			1,000		
7782-41-4	Fluorine	500		10		P056
7782-49-2	Selenium			100*	313	
7782-50-5	Chlorine	100		10	313	
7782-63-0	Ferrous sulfate			1,000		
7782-82-3	Sodium selenite			100		
7782-86-7	Mercurous nitrate			10		
7783-00-8	Selenious acid	1,000/10,000		10		U204
7783-06-4	Hydrogen sulfide	500		100		U135
7783-07-5	Hydrogen selenide	10	1			
7783-20-2	Ammonium sulfate (solution)				313	
7783-35-9	Mercuric sulfate			10		
7783-46-2	Lead fluoride			100		
7783-49-5	Zinc fluoride			1,000		
7783-50-8	Ferric fluoride			100		
7783-56-4	Antimony trifluoride			1,000		
7783-60-0	Sulfur tetrafluoride	100	1			
7783-70-2	Antimony pentafluoride	500	1			
7783-80-4	Tellurium hexafluoride	100	1			
7784-34-1	Arsenous trichloride	500		1		
7784-40-9	Lead arsenate			1		
7784-41-0	Potassium arsenate			1		
7784-42-1	Arsine	100	1			
7784-46-5	Sodium arsenite	500/10,000		1		
7785-84-4	Sodium phosphate, tribasic			5,000		
7786-34-7	Mevinphos	500		10		
7786-81-4	Nickel sulfate			100		
7787-47-5	Beryllium chloride			1		
7787-49-7	Beryllium fluoride			1		

* No reporting of releases is required if the diameter of the pieces of the solid metal released is equal to or exceeds 100 micrometers (0.004 inches).

CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
7787-55-5	Beryllium nitrate			1		
7788-98-9	Ammonium chromate			10		
7789-00-6	Potassium chromate			10		
7789-06-2	Strontium chromate			10		
7789-09-5	Ammonium bichromate			10		
7789-42-6	Cadmium bromide			10		
7789-43-7	Cobaltous bromide			1,000		
7789-61-9	Antimony tribromide			1,000		
7790-94-5	Chlorosulfonic acid			1,000		
7791-12-0	Thallous chloride	100/10,000		100		U216
7791-12-0	Thallium chloride TlCl	100/10,000		100		U216
7791-23-3	Selenium oxychloride	500	1			
7803-51-2	Phosphine	500		100		P096
7803-55-6	Ammonium vanadate			1,000		P119
8001-35-2	Toxaphene	500/10,000		1	313	P123
8001-35-2	Camphechlor	500/10,000		1	X	P123
8001-35-2	Camphene, octachloro-	500/10,000		1	X	P123
8001-58-9	Creosote			1	313	
8003-19-8	Dichloropropane - Dichloropropene (mixture			100		
8003-34-7	Pyrethrins			1		
8014-95-7	Sulfuric acid (fuming)			1,000		
8065-48-3	Demeton	500	1			
10022-70-5	Sodium hypochlorite			100		
10025-73-7	Chromic chloride	1/10,000	1			
10025-87-3	Phosphorus oxychloride	500		1,000		
10025-91-9	Antimony trichloride			1,000		
10026-11-6	Zirconium tetrachloride			5,000		
10026-13-8	Phosphorus pentachloride	500	1			
10028-15-6	Ozone	100	1			
10028-22-5	Ferric sulfate			1,000		
10031-59-1	Thallium sulfate	100/10,000		100		
10034-93-2	Hydrazine sulfate				313	
10039-32-4	Sodium phosphate, dibasic			5,000		
10043-01-3	Aluminum sulfate			5,000		
10045-89-3	Ferrous ammonium sulfate			1,000		
10045-94-0	Mercuric nitrate			10		
10049-04-4	Chlorine dioxide				313	
10049-05-5	Chromous chloride			1,000		
10099-74-8	Lead nitrate			100		
10101-53-8	Chromic sulfate			1,000		

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
10101-63-0	Lead iodide			100		
10101-89-0	Sodium phosphate, tribasic			5,000		
10102-06-4	Uranyl nitrate			100		
10102-18-8	Sodium selenite	100/10,000		100		
10102-20-2	Sodium tellurite	500/10,000	1			
10102-43-9	Nitric oxide	100		10		P076
10102-44-0	Nitrogen dioxide	100		10		P078
10102-45-1	Thallium(I) nitrate			100		U217
10102-48-4	Lead arsenate			1		
10108-64-2	Cadmium chloride			10		
10124-50-2	Potassium arsenite	500/10,000		1		
10124-56-8	Sodium phosphate, tribasic			5,000		
10140-65-5	Sodium phosphate, dibasic			5,000		
10140-87-1	Ethanol, 1,2-dichloro-, acetate	1,000	1			
10192-30-0	Ammonium bisulfite			5,000		
10196-04-0	Ammonium sulfite			5,000		
10210-68-1	Cobalt carbonyl	10/10,000	1			
10265-92-6	Methamidophos	100/10,000	1			
10294-34-5	Boron trichloride	500	1			
10311-84-9	Dialifor	100/10,000	1			
10361-89-4	Sodium phosphate, tribasic			5,000		
10380-29-7	Cupric sulfate, ammoniated			100		
10415-75-5	Mercurous nitrate			10		
10421-48-4	Ferric nitrate			1,000		
10476-95-6	Methacrolein diacetate	1,000	1			
10544-72-6	Nitrogen dioxide			10		
10588-01-9	Sodium bichromate			10		
11096-82-5	Aroclor 1260			1		
11097-69-1	Aroclor 1254			1		
11104-28-2	Aroclor 1221			1		
11115-74-5	Chromic acid			10		
11141-16-5	Aroclor 1232			1		
12002-03-8	Paris green	500/10,000		1		
12002-03-8	Cupric acetoarsenite	500/10,000		1		
12039-52-0	Selenious acid, dithallium(1+) salt			1,000		P114
12054-48-7	Nickel hydroxide			10		
12108-13-3	Manganese, tricarbonyl methylcyclopentadie	100	1			
12122-67-7	Zineb				313	
12125-01-8	Ammonium fluoride			100		
12125-02-9	Ammonium chloride			5,000		

			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
12135-76-1	Ammonium sulfide			100		
12427-38-2	Maneb				313	
12672-29-6	Aroclor 1248			1		
12674-11-2	Aroclor 1016			1		
12771-08-3	Sulfur monochloride			1,000		
13071-79-9	Terbufos	100	1			
13171-21-6	Phosphamidon	100	1			
13194-48-4	Ethoprophos	1,000	1			
13410-01-0	Sodium selenate	100/10,000	1			
13450-90-3	Gallium trichloride	500/10,000	1			
13463-39-3	Nickel carbonyl	1		10		P073
13463-40-6	Iron, pentacarbonyl-	100	1			
13494-80-9	Tellurium	500/10,000	1			
13560-99-1	2,4,5-T salts			1,000		
13597-99-4	Beryllium nitrate			1		
13746-89-9	Zirconium nitrate			5,000		
13765-19-0	Calcium chromate			10		U032
13814-96-5	Lead fluoborate			100		
13826-83-0	Ammonium fluoborate			5,000		
13952-84-6	sec-Butylamine			1,000		
14017-41-5	Cobaltous sulfamate			1,000		
14167-18-1	Salcomine	500/10,000	1			
14216-75-2	Nickel nitrate			100		
14258-49-2	Ammonium oxalate			5,000		
14307-35-8	Lithium chromate			10		
14307-43-8	Ammonium tartrate			5,000		
14639-97-5	Zinc ammonium chloride			1,000		
14639-98-6	Zinc ammonium chloride			1,000		
14644-61-2	Zirconium sulfate			5,000		
15271-41-7	Bicyclo[2.2.1]heptane-2-carbonitrile, 5-ch	500/10,000	1			
15699-18-0	Nickel ammonium sulfate			100		
15739-80-7	Lead sulfate			100		
15950-66-0	2,3,4-Trichlorophenol			10		
16071-86-6	C.I. Direct Brown 95				313	
16543-55-8	N-Nitrosonornicotine				313	
16721-80-5	Sodium hydrosulfide			5,000		
16752-77-5	Methomyl	500/10,000		100		P066
16752-77-5	Ethanimidothioic acid, N-[[methylamino)car	500/10,000		100		P066
16871-71-9	Zinc silicofluoride			5,000		
16919-19-0	Ammonium silicofluoride			1,000		

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CAS Number	Chemical Name	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
16923-95-8	Zirconium potassium fluoride			1,000		
17702-41-9	Decaborane(14)	500/10,000	1			
17702-57-7	Formparanate	100/10,000	1			
18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino			1		U206
19287-45-7	Diborane	100	1			
19624-22-7	Pentaborane	500	1			
20816-12-0	Osmium tetroxide			1,000	313	P087
20816-12-0	Osmium oxide OsO4 (T-4)-			1,000	X	P087
20830-75-5	Digoxin	10/10,000	1			
20830-81-3	Daunomycin			10		U059
20859-73-8	Aluminum phosphide	500		100		P006
21548-32-3	Fosthietan	500	1			
21609-90-5	Leptophos	500/10,000	1			
21908-53-2	Mercuric oxide	500/10,000	1			
21923-23-9	Chlorthiophos	500	1			
22224-92-6	Fenamiphos	10/10,000	1			
23135-22-0	Oxamyl	100/10,000	1			
23422-53-9	Formetanate hydrochloride	500/10,000	1			
23505-41-1	Pirimifos-ethyl	1,000	1			
23950-58-5	Benzamide,3,5-dichloro-N-(1,1-dimethyl-2-p			5,000		U192
24017-47-8	Triazofos	500	1			
24934-91-6	Chlormephos	500	1			
25154-54-5	Dinitrobenzene (mixed isomers)			100		
25154-55-6	Nitrophenol (mixed isomers)			100		
25155-30-0	Sodium dodecylbenzenesulfonate			1,000		
25167-82-2	Trichlorophenol			10		
25168-15-4	2,4,5-T esters			1,000		
25168-26-7	2,4-D Esters			100		
25321-14-6	Dinitrotoluene (mixed isomers)			10	313	
25321-22-6	Dichlorobenzene (mixed isomers)			100	313	
25321-22-6	Dichlorobenzene			100	X	
25376-45-8	Diaminotoluene (mixed isomers)			10	313	U221
25376-45-8	Toluenediamine			10	X	
25550-58-7	Dinitrophenol			10		
26264-06-2	Calcium dodecylbenzenesulfonate			1,000		
26419-73-8	Carbamic acid, methyl-, O-(((2,4-dimethyl-	100/10,000	1			
26471-62-5	Toluenediisocyanate (mixed isomers)			100	313	U223
26628-22-8	Sodium azide (Na(N3))	500		1,000		P105
26638-19-7	Dichloropropane			1,000		
27137-85-5	Trichloro(dichlorophenyl)silane	500	1			

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			Section 304			
CAS Number	Chemical Name	Sec. 302(EHS) TPQ	EHS RQ	CERCLA RQ	Sec 313	RCRA Code
27176-87-0	Dodecylbenzenesulfonic acid			1,000		
27323-41-7	Triethanolamine dodecylbenzene sulfonate			1,000		
27774-13-6	Vanadyl sulfate			1,000		
28300-74-5	Antimony potassium tartrate			100		
28347-13-9	Xylylene dichloride	100/10,000	1			
28772-56-7	Bromadiolone	100/10,000	1			
30525-89-4	Paraformaldehyde			1,000		
30674-80-7	Methacryloyloxyethyl isocyanate	100	1			
32534-95-5	2,4,5-TP esters			100		
33213-65-9	beta - Endosulfan			1		
36478-76-9	Uranyl nitrate			100		
37211-05-5	Nickel chloride			100		
39156-41-7	2,4-Diaminoanisole sulfate				313	
39196-18-4	Thiofanox	100/10,000		100		P045
42504-46-1	Isopropanolamine dodecylbenzene sulfonate			1,000		
50782-69-9	Phosphonothioic acid, methyl-, S-(2-(bis(1	100	1			
52628-25-8	Zinc ammonium chloride			1,000		
52652-59-2	Lead stearate			5,000		
52740-16-6	Calcium arsenite			1		
53467-11-1	2,4-D Esters			100		
53469-21-9	Aroclor 1242			1		
53558-25-1	Pyriminil	100/10,000	1			
55488-87-4	Ferric ammonium oxalate			1,000		
56189-09-4	Lead stearate			5,000		
58270-08-9	Zinc, dichloro(4,4-dimethyl-5((((methylami	100/10,000	1			
61792-07-2	2,4,5-T esters			1,000		
62207-76-5	Cobalt, ((2,2'-(1,2-ethanediylbis(nitrilom	100/10,000	1			
**	Organorhodium Complex (PMN-82-147)	10/10,000	1			

** This chemical was identified from a Premanufacture Review Notice (PMN) submitted to EPA. The submitter has claimed certain information on the submission to be confidential, including specific chemical identity.

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Chemical Category	Sec. 302(EHS) TPQ	Section 304 EHS RQ	Section 304 CERCLA RQ	Sec 313	RCRA Code
Antimony Compounds			***	313	
Arsenic Compounds			***	313	
Barium Compounds				313	
Beryllium Compounds			***	313	
Cadmium Compounds			***	313	
Chlordane (Technical Mixture and Metabolites)			***		
Chlorinated Benzenes			***		
Chlorinated Ethanes			***		
Chlorinated Naphthalene			***		
Chlorophenols			***	313	
Chlorinated Phenols			***	X	
Chloroalkyl Ethers			***		
Chromium Compounds			***	313	
Cobalt Compounds			1+	313	
Coke Oven Emissions			1		
Copper Compounds			***	313	
Cyanide Compounds			***	313	
DDT and Metabolites			***		
Dichlorobenzidine			***		
Diphenylhydrazine			***		
Endosulfan and Metabolites			***		
Endrin and Metabolites			***		
Glycol Ethers			1+	313	
Haloethers			***		
Halomethanes			***		
Heptachlor and Metabolites			***		
Lead Compounds			***	313	
Manganese Compounds			1+	313	
Mercury Compounds			***	313	
Fine mineral fibers			1+		
Nickel Compounds			***	313	
Nitrophenols			***		
Nitrosamines			***		
Phthalate Esters			***		
Polybrominated Biphenyls (PBBs)				313	
Polycyclic organic matter			1+		
Polynuclear Aromatic Hydrocarbons			***		
Selenium Compounds			***	313	
Silver Compounds			***	313	
Thallium Compounds			***	313	
Zinc Compounds			***	313	

*** Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985).

+ Listed as hazardous air pollutant under section 112(b) of the Clear Air Act; statutory RQ of one pound applies until RQs are adjusted.

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

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CAS Number	Chemical Name
83-32-9	Acenaphthene
208-96-8	Acenaphthylene
75-07-0	Acetaldehyde
75-87-6	Acetaldehyde, trichloro-
60-35-5	Acetamide
64-19-7	Acetic acid
108-24-7	Acetic anhydride
67-64-1	Acetone
75-86-5	Acetone cyanohydrin
1752-30-3	Acetone thiosemicarbazide
75-05-8	Acetonitrile
98-86-2	Acetophenone
53-96-3	2-Acetylaminofluorene
506-96-7	Acetyl bromide
75-36-5	Acetyl chloride
591-08-2	1-Acetyl-2-thiourea
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
814-68-6	Acrylyl chloride
124-04-9	Adipic acid
111-69-3	Adiponitrile
116-06-3	Aldicarb
309-00-2	Aldrin
107-18-6	Allyl alcohol
107-11-9	Allylamine
107-05-1	Allyl chloride
7429-90-5	Aluminum (fume or dust)
1344-28-1	Aluminum oxide (fibrous forms)
20859-73-8	Aluminum phosphide
10043-01-3	Aluminum sulfate
117-79-3	2-Aminoanthraquinone
60-09-3	4-Aminoazobenzene
92-67-1	4-Aminobiphenyl
82-28-0	1-Amino-2-methylanthraquinone
54-62-6	Aminopterin
504-24-5	4-Aminopyridine
78-53-5	Amiton
3734-97-2	Amiton oxalate
61-82-5	Amitrole
7664-41-7	Ammonia
631-61-8	Ammonium acetate
1863-63-4	Ammonium benzoate
1066-33-7	Ammonium bicarbonate
7789-09-5	Ammonium bichromate
1341-49-7	Ammonium bifluoride
10192-30-0	Ammonium bisulfite
1111-78-0	Ammonium carbamate
506-87-6	Ammonium carbonate
12125-02-9	Ammonium chloride
7788-98-9	Ammonium chromate
3012-65-5	Ammonium citrate, dibasic
13826-83-0	Ammonium fluoborate
12125-01-8	Ammonium fluoride
1336-21-6	Ammonium hydroxide
6484-52-2	Ammonium nitrate (solution)
6009-70-7	Ammonium oxalate
5972-73-6	Ammonium oxalate
14258-49-2	Ammonium oxalate
131-74-8	Ammonium picrate
16919-19-0	Ammonium silicofluoride
7773-06-0	Ammonium sulfamate
7783-20-2	Ammonium sulfate (solution)
12135-76-1	Ammonium sulfide
10196-04-0	Ammonium sulfite
14307-43-8	Ammonium tartrate
3164-29-2	Ammonium tartrate
1762-95-4	Ammonium thiocyanate
7803-55-6	Ammonium vanadate
300-62-9	Amphetamine
628-63-7	Amyl acetate
123-92-2	iso-Amyl acetate
626-38-0	sec-Amyl acetate
625-16-1	tert-Amyl acetate
62-53-3	Aniline
88-05-1	Aniline, 2,4,6-trimethyl-
90-04-0	o-Anisidine
104-94-9	p-Anisidine
134-29-2	o-Anisidine hydrochloride
120-12-7	Anthracene
7440-36-0	Antimony
	Antimony Compounds
7647-18-9	Antimony pentachloride
7783-70-2	Antimony pentafluoride
28300-74-5	Antimony potassium tartrate
7789-61-9	Antimony tribromide
10025-91-9	Antimony trichloride
7783-56-4	Antimony trifluoride
1309-64-4	Antimony trioxide
1397-94-0	Antimycin A
86-88-4	Antu
12674-11-2	Aroclor 1016
11104-28-2	Aroclor 1221
11141-16-5	Aroclor 1232
53469-21-9	Aroclor 1242
12672-29-6	Aroclor 1248
11097-69-1	Aroclor 1254
11096-82-5	Aroclor 1260
7440-38-2	Arsenic

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

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CAS Number	Chemical Name	CAS Number	Chemical Name
1327-52-2	Arsenic acid	7440-41-7	Beryllium
7778-39-4	Arsenic acid	7787-47-5	Beryllium chloride
	Arsenic Compounds		Beryllium Compounds
1303-32-8	Arsenic disulfide	7787-49-7	Beryllium fluoride
1303-28-2	Arsenic pentoxide	13597-99-4	Beryllium nitrate
1327-53-3	Arsenic trioxide	7787-55-5	Beryllium nitrate
1303-33-9	Arsenic trisulfide	319-84-6	alpha-BHC
1327-53-3	Arsenous oxide	319-85-7	beta-BHC
7784-34-1	Arsenous trichloride	319-86-8	delta-BHC
7784-42-1	Arsine	15271-41-7	Bicyclo[2.2.1]heptane-2-carbonitrile, 5-ch
1332-21-4	Asbestos (friable)	1464-53-5	2,2'-Bioxirane
492-80-8	Auramine	92-52-4	Biphenyl
115-02-6	Azaserine	111-91-1	Bis(2-chloroethoxy) methane
2642-71-9	Azinphos-ethyl	111-44-4	Bis(2-chloroethyl) ether
86-50-0	Azinphos-methyl	542-88-1	Bis(chloromethyl) ether
151-56-4	Aziridine	108-60-1	Bis(2-chloro-1-methylethyl)ether
75-55-8	Aziridine, 2-methyl	534-07-6	Bis(chloromethyl) ketone
7440-39-3	Barium	103-23-1	Bis(2-ethylhexyl) adipate
	Barium Compounds	117-81-7	Bis(2-ethylhexyl)phthalate
542-62-1	Barium cyanide	4044-65-9	Bitoscanate
225-51-4	Benz[c]acridine	10294-34-5	Boron trichloride
98-87-3	Benzal chloride	7637-07-2	Boron trifluoride
55-21-0	Benzamide	353-42-4	Boron trifluoride compound with methyl eth
23950-58-5	Benzamide,3,5-dichloro-N-(1,1-dimethyl-2-p	28772-56-7	Bromadiolone
56-55-3	Benz[a]anthracene	7726-95-6	Bromine
98-16-8	Benzenamine, 3-(trifluoromethyl)-	598-31-2	Bromoacetone
71-43-2	Benzene	353-59-3	Bromochlorodifluoromethane [Halon 1211]
98-05-5	Benzenearsonic acid	75-25-2	Bromoform
100-14-1	Benzene, 1-(chloromethyl)-4-nitro-	74-83-9	Bromomethane
108-38-3	Benzene, m-dimethyl-	101-55-3	4-Bromophenyl phenyl ether
95-47-6	Benzene, o-dimethyl-	75-63-8	Bromotrifluoromethane [Halon 1301]
106-42-3	Benzene, p-dimethyl-	357-57-3	Brucine
122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-	106-99-0	1,3-Butadiene
98-09-9	Benzenesulfonyl chloride	764-41-0	2-Butene, 1,4-dichloro-
108-98-5	Benzenethiol	123-86-4	Butyl acetate
92-87-5	Benzidine	110-19-0	iso-Butyl acetate
3615-21-2	Benzimidazole, 4,5-dichloro-2-(trifluorome	105-46-4	sec-Butyl acetate
205-99-2	Benzo[b]fluoranthene	540-88-5	tert-Butyl acetate
207-08-9	Benzo(k)fluoranthene	141-32-2	Butyl acrylate
65-85-0	Benzoic acid	71-36-3	n-Butyl alcohol
98-07-7	Benzoic trichloride	78-92-2	sec-Butyl alcohol
100-47-0	Benzonitrile	75-65-0	tert-Butyl alcohol
191-24-2	Benzo[ghi]perylene	109-73-9	Butylamine
50-32-8	Benzo[a]pyrene	78-81-9	iso-Butylamine
106-51-4	p-Benzoquinone	513-49-5	sec-Butylamine
98-07-7	Benzotrichloride	13952-84-6	sec-Butylamine
98-88-4	Benzoyl chloride	75-64-9	tert-Butylamine
94-36-0	Benzoyl peroxide	85-68-7	Butyl benzyl phthalate
100-44-7	Benzyl chloride	106-88-7	1,2-Butylene oxide
140-29-4	Benzyl cyanide	84-74-2	n-Butyl phthalate

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ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

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CAS Number	Chemical Name
123-72-8	Butyraldehyde
107-92-6	Butyric acid
79-31-2	iso-Butyric acid
75-60-5	Cacodylic acid
7440-43-9	Cadmium
543-90-8	Cadmium acetate
7789-42-6	Cadmium bromide
10108-64-2	Cadmium chloride
	Cadmium Compounds
1306-19-0	Cadmium oxide
2223-93-0	Cadmium stearate
7778-44-1	Calcium arsenate
52740-16-6	Calcium arsenite
75-20-7	Calcium carbide
13765-19-0	Calcium chromate
156-62-7	Calcium cyanamide
592-01-8	Calcium cyanide
26264-06-2	Calcium dodecylbenzenesulfonate
7778-54-3	Calcium hypochlorite
8001-35-2	Camphechlor
8001-35-2	Camphene, octachloro-
56-25-7	Cantharidin
105-60-2	Caprolactam
133-06-2	Captan
51-83-2	Carbachol chloride
51-79-6	Carbamic acid, ethyl ester
26419-73-8	Carbamic acid, methyl-, O-(((2,4-dimethyl-
63-25-2	Carbaryl
1563-66-2	Carbofuran
75-15-0	Carbon disulfide
353-50-4	Carbonic difluoride
56-23-5	Carbon tetrachloride
463-58-1	Carbonyl sulfide
786-19-6	Carbophenothion
120-80-9	Catechol
75-69-4	CFC-11
75-71-8	CFC-12
76-14-2	CFC-114
76-15-3	CFC-115
133-90-4	Chloramben
305-03-3	Chlorambucil
57-74-9	Chlordane
	Chlordane (Technical Mixture and Metabolit
470-90-6	Chlorfenvinfos
	Chlorinated Benzenes
	Chlorinated Ethanes
	Chlorinated Naphthalene
	Chlorinated Phenols
7782-50-5	Chlorine
10049-04-4	Chlorine dioxide
24934-91-6	Chlormephos
999-81-5	Chlormequat chloride
494-03-1	Chlornaphazine
107-20-0	Chloroacetaldehyde
79-11-8	Chloroacetic acid
532-27-4	2-Chloroacetophenone
	Chloroalkyl Ethers
106-47-8	p-Chloroaniline
108-90-7	Chlorobenzene
510-15-6	Chlorobenzilate
59-50-7	p-Chloro-m-cresol
124-48-1	Chlorodibromomethane
75-00-3	Chloroethane
107-07-3	Chloroethanol
627-11-2	Chloroethyl chloroformate
110-75-8	2-Chloroethyl vinyl ether
67-66-3	Chloroform
74-87-3	Chloromethane
107-30-2	Chloromethyl methyl ether
542-88-1	Chloromethyl ether
91-58-7	2-Chloronaphthalene
3691-35-8	Chlorophacinone
95-57-8	2-Chlorophenol
	Chlorophenols
7005-72-3	4-Chlorophenyl phenyl ether
126-99-8	Chloroprene
542-76-7	3-Chloropropionitrile
7790-94-5	Chlorosulfonic acid
1897-45-6	Chlorothalonil
3165-93-3	4-Chloro-o-toluidine, hydrochloride
1982-47-4	Chloroxuron
2921-88-2	Chlorpyrifos
21923-23-9	Chlorthiophos
1066-30-4	Chromic acetate
11115-74-5	Chromic acid
7738-94-5	Chromic acid
10025-73-7	Chromic chloride
10101-53-8	Chromic sulfate
7440-47-3	Chromium
	Chromium Compounds
10049-05-5	Chromous chloride
218-01-9	Chrysene
4680-78-8	C.I. Acid Green 3
569-64-2	C.I. Basic Green 4
989-38-8	C.I. Basic Red 1
1937-37-7	C.I. Direct Black 38
2602-46-2	C.I. Direct Blue 6
16071-86-6	C.I. Direct Brown 95
2832-40-8	C.I. Disperse Yellow 3
3761-53-3	C.I. Food Red 5

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

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CAS Number	Chemical Name	CAS Number	Chemical Name
81-88-9	C.I. Food Red 15	66-81-9	Cycloheximide
3118-97-6	C.I. Solvent Orange 7	108-91-8	Cyclohexylamine
97-56-3	C.I. Solvent Yellow 3	131-89-5	2-Cyclohexyl-4,6-Dinitrophenol
842-07-9	C.I. Solvent Yellow 14	50-18-0	Cyclophosphamide
492-80-8	C.I. Solvent Yellow 34	94-75-7	2,4-D
128-66-5	C.I. Vat Yellow 4	94-75-7	2,4-D Acid
7440-48-4	Cobalt	94-11-1	2,4-D Esters
10210-68-1	Cobalt carbonyl	94-79-1	2,4-D Esters
	Cobalt Compounds	94-80-4	2,4-D Esters
62207-76-5	Cobalt, ((2,2'-(1,2-ethanediylbis(nitrilom	1320-18-9	2,4-D Esters
7789-43-7	Cobaltous bromide	1928-38-7	2,4-D Esters
544-18-3	Cobaltous formate	1928-61-6	2,4-D Esters
14017-41-5	Cobaltous sulfamate	1929-73-3	2,4-D Esters
	Coke Oven Emissions	2971-38-2	2,4-D Esters
64-86-8	Colchicine	25168-26-7	2,4-D Esters
7440-50-8	Copper	53467-11-1	2,4-D Esters
	Copper Compounds	94-75-7	2,4-D, salts and esters
544-92-3	Copper cyanide	20830-81-3	Daunomycin
56-72-4	Coumaphos	96-12-8	DBCP
5836-29-3	Coumatetralyl	72-54-8	DDD
8001-58-9	Creosote	72-55-9	DDE
120-71-8	p-Cresidine	3547-04-4	DDE
108-39-4	m-Cresol	50-29-3	DDT
95-48-7	o-Cresol		DDT and Metabolites
106-44-5	p-Cresol	17702-41-9	Decaborane(14)
1319-77-3	Cresol (mixed isomers)	1163-19-5	Decabromodiphenyl oxide
535-89-7	Crimidine	117-81-7	DEHP
4170-30-3	Crotonaldehyde	8065-48-3	Demeton
123-73-9	Crotonaldehyde, (E)-	919-86-8	Demeton-S-methyl
98-82-8	Cumene	10311-84-9	Dialifor
80-15-9	Cumene hydroperoxide	2303-16-4	Diallate
135-20-6	Cupferron	615-05-4	2,4-Diaminoanisole
142-71-2	Cupric acetate	39156-41-7	2,4-Diaminoanisole sulfate
12002-03-8	Cupric acetoarsenite	101-80-4	4,4'-Diaminodiphenyl ether
7447-39-4	Cupric chloride	496-72-0	Diaminotoluene
3251-23-8	Cupric nitrate	823-40-5	Diaminotoluene
5893-66-3	Cupric oxalate	95-80-7	2,4-Diaminotoluene
7758-98-7	Cupric sulfate	25376-45-8	Diaminotoluene (mixed isomers)
10380-29-7	Cupric sulfate, ammoniated	333-41-5	Diazinon
815-82-7	Cupric tartrate	334-88-3	Diazomethane
	Cyanide Compounds	53-70-3	Dibenz[a,h]anthracene
57-12-5	Cyanides (soluble salts and complexes)	132-64-9	Dibenzofuran
460-19-5	Cyanogen	189-55-9	Dibenz[a,i]pyrene
506-68-3	Cyanogen bromide	19287-45-7	Diborane
506-77-4	Cyanogen chloride	96-12-8	1,2-Dibromo-3-chloropropane
506-78-5	Cyanogen iodide	106-93-4	1,2-Dibromoethane
2636-26-2	Cyanophos	124-73-2	Dibromotetrafluoroethane [Halon 2402]
675-14-9	Cyanuric fluoride	84-74-2	Dibutyl phthalate
110-82-7	Cyclohexane	1918-00-9	Dicamba
108-94-1	Cyclohexanone	1194-65-6	Dichlobenil

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

CAS Number	Chemical Name	CAS Number	Chemical Name
117-80-6	Dichlone	64-67-5	Diethyl sulfate
25321-22-6	Dichlorobenzene	71-63-6	Digitoxin
95-50-1	o-Dichlorobenzene	2238-07-5	Diglycidyl ether
95-50-1	1,2-Dichlorobenzene	20830-75-5	Digoxin
541-73-1	1,3-Dichlorobenzene	94-58-6	Dihydrosafrole
106-46-7	1,4-Dichlorobenzene	55-91-4	Diisopropylfluorophosphate
25321-22-6	Dichlorobenzene (mixed isomers)	115-26-4	Dimefox
91-94-1	3,3'-Dichlorobenzidine	60-51-5	Dimethoate
	Dichlorobenzidine	119-90-4	3,3'-Dimethoxybenzidine
75-27-4	Dichlorobromomethane	124-40-3	Dimethylamine
110-57-6	Trans-1,4-dichlorobutene	60-11-7	4-Dimethylaminoazobenzene
75-71-8	Dichlorodifluoromethane [CFC-12]	60-11-7	Dimethylaminoazobenzene
107-06-2	1,2-Dichloroethane	121-69-7	N,N-Dimethylaniline
75-34-3	1,1-Dichloroethane	57-97-6	7,12-Dimethylbenz[a]anthracene
540-59-0	1,2-Dichloroethylene	119-93-7	3,3'-Dimethylbenzidine
75-35-4	1,1-Dichloroethylene	79-44-7	Dimethylcarbamyl chloride
156-60-5	1,2-Dichloroethylene	75-78-5	Dimethyldichlorosilane
111-44-4	Dichloroethyl ether	68-12-2	Dimethylformamide
108-60-1	Dichloroisopropyl ether	57-14-7	1,1-Dimethyl hydrazine
75-09-2	Dichloromethane	57-14-7	Dimethylhydrazine
542-88-1	Dichloromethyl ether	105-67-9	2,4-Dimethylphenol
149-74-6	Dichloromethylphenylsilane	99-98-9	Dimethyl-p-phenylenediamine
120-83-2	2,4-Dichlorophenol	2524-03-0	Dimethyl phosphorochloridothioate
87-65-0	2,6-Dichlorophenol	131-11-3	Dimethyl phthalate
696-28-6	Dichlorophenylarsine	77-78-1	Dimethyl sulfate
78-87-5	1,2-Dichloropropane	644-64-4	Dimetilan
26638-19-7	Dichloropropane	25154-54-5	Dinitrobenzene (mixed isomers)
8003-19-8	Dichloropropane - Dichloropropene (mixture	99-65-0	m-Dinitrobenzene
78-99-9	1,1-Dichloropropane	528-29-0	o-Dinitrobenzene
142-28-9	1,3-Dichloropropane	100-25-4	p-Dinitrobenzene
542-75-6	1,3-Dichloropropene	534-52-1	Dinitrocresol
78-88-6	2,3-Dichloropropene	534-52-1	4,6-Dinitro-o-cresol
75-99-0	2,2-Dichloropropionic acid	534-52-1	4,6-Dinitro-o-cresol and salts
542-75-6	1,3-Dichloropropylene	25550-58-7	Dinitrophenol
76-14-2	Dichlorotetrafluoroethane [CFC-114]	51-28-5	2,4-Dinitrophenol
62-73-7	Dichlorvos	329-71-5	2,5-Dinitrophenol
115-32-2	Dicofol	573-56-8	2,6-Dinitrophenol
141-66-2	Dicrotophos	25321-14-6	Dinitrotoluene (mixed isomers)
60-57-1	Dieldrin	121-14-2	2,4-Dinitrotoluene
1464-53-5	Diepoxybutane	606-20-2	2,6-Dinitrotoluene
111-42-2	Diethanolamine	610-39-9	3,4-Dinitrotoluene
109-89-7	Diethylamine	88-85-7	Dinoseb
692-42-2	Diethylarsine	1420-07-1	Dinoterb
1642-54-2	Diethylcarbamazine citrate	117-84-0	n-Dioctylphthalate
814-49-3	Diethyl chlorophosphate	117-84-0	Di-n-octyl phthalate
117-81-7	Di(2-ethylhexyl) phthalate	123-91-1	1,4-Dioxane
311-45-5	Diethyl-p-nitrophenyl phosphate	78-34-2	Dioxathion
84-66-2	Diethyl phthalate	82-66-6	Diphacinone
297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate	122-66-7	1,2-Diphenylhydrazine
56-53-1	Diethylstilbestrol		Diphenylhydrazine

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

CAS Number	Chemical Name
152-16-9	Diphosphoramide, octamethyl-
142-84-7	Dipropylamine
85-00-7	Diquat
2764-72-9	Diquat
298-04-4	Disulfoton
514-73-8	Dithiazanine iodide
541-53-7	Dithiobiuret
3288-58-2	O,O-Diethyl S-methyl dithiophosphate
330-54-1	Diuron
27176-87-0	Dodecylbenzenesulfonic acid
316-42-7	Emetine, dihydrochloride
115-29-7	Endosulfan
959-98-8	alpha - Endosulfan
33213-65-9	beta - Endosulfan
	Endosulfan and Metabolites
1031-07-8	Endosulfan sulfate
145-73-3	Endothall
2778-04-3	Endothion
72-20-8	Endrin
7421-93-4	Endrin aldehyde
	Endrin and Metabolites
106-89-8	Epichlorohydrin
51-43-4	Epinephrine
2104-64-5	EPN
50-14-6	Ergocalciferol
379-79-3	Ergotamine tartrate
1622-32-8	Ethanesulfonyl chloride, 2-chloro-
630-20-6	Ethane, 1,1,1,2-tetrachloro-
16752-77-5	Ethanimidothioic acid, N-[[(methylamino)car
10140-87-1	Ethanol, 1,2-dichloro-, acetate
110-80-5	Ethanol, 2-ethoxy-
563-12-2	Ethion
13194-48-4	Ethoprophos
110-80-5	2-Ethoxyethanol
141-78-6	Ethyl acetate
140-88-5	Ethyl acrylate
100-41-4	Ethylbenzene
538-07-8	Ethylbis(2-chloroethyl)amine
51-79-6	Ethyl carbamate
75-00-3	Ethyl chloride
541-41-3	Ethyl chloroformate
107-12-0	Ethyl cyanide
74-85-1	Ethylene
111-54-6	Ethylenebisdithiocarbamic acid, salts & es
107-15-3	Ethylenediamine
60-00-4	Ethylenediamine-tetraacetic acid (EDTA)
106-93-4	Ethylene dibromide
107-06-2	Ethylene dichloride
371-62-0	Ethylene fluorohydrin
107-21-1	Ethylene glycol
151-56-4	Ethyleneimine
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
60-29-7	Ethyl ether
97-63-2	Ethyl methacrylate
62-50-0	Ethyl methanesulfonate
542-90-5	Ethylthiocyanate
52-85-7	Famphur
22224-92-6	Fenamiphos
122-14-5	Fenitrothion
115-90-2	Fensulfothion
1185-57-5	Ferric ammonium citrate
2944-67-4	Ferric ammonium oxalate
55488-87-4	Ferric ammonium oxalate
7705-08-0	Ferric chloride
7783-50-8	Ferric fluoride
10421-48-4	Ferric nitrate
10028-22-5	Ferric sulfate
10045-89-3	Ferrous ammonium sulfate
7758-94-3	Ferrous chloride
7720-78-7	Ferrous sulfate
7782-63-0	Ferrous sulfate
4301-50-2	Fluenetil
2164-17-2	Fluometuron
206-44-0	Fluoranthene
86-73-7	Fluorene
7782-41-4	Fluorine
640-19-7	Fluoroacetamide
144-49-0	Fluoroacetic acid
62-74-8	Fluoroacetic acid, sodium salt
359-06-8	Fluoroacetyl chloride
51-21-8	Fluorouracil
944-22-9	Fonofos
50-00-0	Formaldehyde
107-16-4	Formaldehyde cyanohydrin
23422-53-9	Formetanate hydrochloride
64-18-6	Formic acid
2540-82-1	Formothion
17702-57-7	Formparanate
21548-32-3	Fosthietan
76-13-1	Freon 113
3878-19-1	Fuberidazole
110-17-8	Fumaric acid
110-00-9	Furan
109-99-9	Furan, tetrahydro-
98-01-1	Furfural
13450-90-3	Gallium trichloride
18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino
765-34-4	Glycidylaldehyde
	Glycol Ethers

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CAS Number	Chemical Name	CAS Number	Chemical Name
70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	55-91-4	Isofluorphate
86-50-0	Guthion	78-59-1	Isophorone
	Haloethers	4098-71-9	Isophorone diisocyanate
	Halomethanes	78-79-5	Isoprene
353-59-3	Halon 1211	42504-46-1	Isopropanolamine dodecylbenzene sulfonate
75-63-8	Halon 1301	67-63-0	Isopropyl alcohol (mfg-strong acid process
124-73-2	Halon 2402	108-23-6	Isopropyl chloroformate
76-44-8	Heptachlor	80-05-7	4,4'-Isopropylidenediphenol
	Heptachlor and Metabolites	119-38-0	Isopropylmethylpyrazolyl dimethylcarbamate
1024-57-3	Heptachlor epoxide	120-58-1	Isusafrole
118-74-1	Hexachlorobenzene	2763-96-4	5-(Aminomethyl)-3-isoxazolol
87-68-3	Hexachloro-1,3-butadiene	143-50-0	Kepone
87-68-3	Hexachlorobutadiene	78-97-7	Lactonitrile
77-47-4	Hexachlorocyclopentadiene	303-34-4	Lasiocarpine
58-89-9	Hexachlorocyclohexane (gamma isomer)	7439-92-1	Lead
67-72-1	Hexachloroethane		Lead Compounds
1335-87-1	Hexachloronaphthalene	301-04-2	Lead acetate
70-30-4	Hexachlorophene	7784-40-9	Lead arsenate
1888-71-7	Hexachloropropene	7645-25-2	Lead arsenate
757-58-4	Hexaethyl tetraphosphate	10102-48-4	Lead arsenate
822-06-0	Hexamethylene-1,6-diisocyanate	7758-95-4	Lead chloride
4835-11-4	Hexamethylenediamine, N,N'-dibutyl-	13814-96-5	Lead fluoborate
680-31-9	Hexamethylphosphoramide	7783-46-2	Lead fluoride
110-54-3	Hexane	10101-63-0	Lead iodide
302-01-2	Hydrazine	10099-74-8	Lead nitrate
1615-80-1	Hydrazine, 1,2-diethyl-	7446-27-7	Lead phosphate
57-14-7	Hydrazine, 1,1-dimethyl-	7428-48-0	Lead stearate
540-73-8	Hydrazine, 1,2-dimethyl-	1072-35-1	Lead stearate
122-66-7	Hydrazine, 1,2-diphenyl-	52652-59-2	Lead stearate
10034-93-2	Hydrazine sulfate	56189-09-4	Lead stearate
122-66-7	Hydrazobenzene	1335-32-6	Lead subacetate
7647-01-0	Hydrochloric acid	15739-80-7	Lead sulfate
74-90-8	Hydrocyanic acid	7446-14-2	Lead sulfate
7664-39-3	Hydrofluoric acid	1314-87-0	Lead sulfide
7647-01-0	Hydrogen chloride (gas only)	592-87-0	Lead thiocyanate
74-90-8	Hydrogen cyanide	21609-90-5	Leptophos
7664-39-3	Hydrogen fluoride	541-25-3	Lewisite
7722-84-1	Hydrogen peroxide (Conc.> 52%)	58-89-9	Lindane
7783-07-5	Hydrogen selenide	14307-35-8	Lithium chromate
7783-06-4	Hydrogen sulfide	7580-67-8	Lithium hydride
80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	121-75-5	Malathion
123-31-9	Hydroquinone	110-16-7	Maleic acid
193-39-5	Indeno(1,2,3-cd)pyrene	108-31-6	Maleic anhydride
13463-40-6	Iron, pentacarbonyl-	123-33-1	Maleic hydrazide
297-78-9	Isobenzan	109-77-3	Malononitrile
78-83-1	Isobutyl alcohol	12427-38-2	Maneb
78-84-2	Isobutyraldehyde	7439-96-5	Manganese
78-82-0	Isobutyronitrile		Manganese Compounds
102-36-3	Isocyanic acid, 3,4-dichlorophenyl ester	12108-13-3	Manganese, tricarbonyl methylcyclopentadie
465-73-6	Isodrin	101-68-8	MBI

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CAS Number	Chemical Name
101-14-4	MBOCA
51-75-2	Mechlorethamine
148-82-3	Melphalan
950-10-7	Mephosfolan
2032-65-7	Mercaptodimethur
1600-27-7	Mercuric acetate
7487-94-7	Mercuric chloride
592-04-1	Mercuric cyanide
10045-94-0	Mercuric nitrate
21908-53-2	Mercuric oxide
7783-35-9	Mercuric sulfate
592-85-8	Mercuric thiocyanate
10415-75-5	Mercurous nitrate
7782-86-7	Mercurous nitrate
7439-97-6	Mercury
	Mercury Compounds
628-86-4	Mercury fulminate
10476-95-6	Methacrolein diacetate
760-93-0	Methacrylic anhydride
126-98-7	Methacrylonitrile
920-46-7	Methacryloyl chloride
30674-80-7	Methacryloyloxyethyl isocyanate
10265-92-6	Methamidophos
6[illegible]-9	Methanamine, N-methyl-N-nitroso-
558-25-8	Methanesulfonyl fluoride
67-56-1	Methanol
91-80-5	Methapyrilene
950-37-8	Methidathion
2032-65-7	Methiocarb
16752-77-5	Methomyl
72-43-5	Methoxychlor
109-86-4	2-Methoxyethanol
151-38-2	Methoxyethylmercuric acetate
96-33-3	Methyl acrylate
74-83-9	Methyl bromide
74-87-3	Methyl chloride
80-63-7	Methyl 2-chloroacrylate
71-55-6	Methyl chloroform
79-22-1	Methyl chloroformate
56-49-5	3-Methylcholanthrene
101-14-4	4,4'-Methylenebis(2-chloroaniline)
101-61-1	4,4'-Methylenebis(N,N-dimethyl)benzenamine
101-68-8	Methylenebis(phenylisocyanate)
74-95-3	Methylene bromide
75-09-2	Methylene chloride
101-77-9	4,4'-Methylenedianiline
78-93-3	Methyl ethyl ketone
78-93-3	Methyl ethyl ketone (MEK)
1338-23-4	Methyl ethyl ketone peroxide
60-34-4	Methyl hydrazine
74-88-4	Methyl iodide
108-10-1	Methyl isobutyl ketone
624-83-9	Methyl isocyanate
556-61-6	Methyl isothiocyanate
74-93-1	Methyl mercaptan
502-39-6	Methylmercuric dicyanamide
80-62-6	Methyl methacrylate
298-00-0	Methyl parathion
3735-23-7	Methyl phenkapton
676-97-1	Methyl phosphonic dichloride
1634-04-4	Methyl tert-butyl ether
556-64-9	Methyl thiocyanate
56-04-2	Methylthiouracil
75-79-6	Methyltrichlorosilane
78-94-4	Methyl vinyl ketone
1129-41-5	Metolcarb
7786-34-7	Mevinphos
315-18-4	Mexacarbate
90-94-8	Michler's ketone
	Fine mineral fibers
50-07-7	Mitomycin C
1313-27-5	Molybdenum trioxide
76-15-3	Monochloropentafluoroethane [CFC-115]
6923-22-4	Monocrotophos
75-04-7	Monoethylamine
74-89-5	Monomethylamine
2763-96-4	Muscimol
505-60-2	Mustard gas
300-76-5	Naled
91-20-3	Naphthalene
1338-24-5	Naphthenic acid
130-15-4	1,4-Naphthoquinone
134-32-7	alpha-Naphthylamine
91-59-8	beta-Naphthylamine
7440-02-0	Nickel
	Nickel Compounds
15699-18-0	Nickel ammonium sulfate
13463-39-3	Nickel carbonyl
7718-54-9	Nickel chloride
37211-05-5	Nickel chloride
557-19-7	Nickel cyanide
12054-48-7	Nickel hydroxide
14216-75-2	Nickel nitrate
7786-81-4	Nickel sulfate
54-11-5	Nicotine
54-11-5	Nicotine and salts
65-30-5	Nicotine sulfate
7697-37-2	Nitric acid
10102-43-9	Nitric oxide
139-13-9	Nitrilotriacetic acid

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

CAS Number	Chemical Name
100-01-6	p-Nitroaniline
99-59-2	5-Nitro-o-anisidine
98-95-3	Nitrobenzene
92-93-3	4-Nitrobiphenyl
1122-60-7	Nitrocyclohexane
1836-75-5	Nitrofen
10102-44-0	Nitrogen dioxide
10544-72-6	Nitrogen dioxide
51-75-2	Nitrogen mustard
55-63-0	Nitroglycerin
25154-55-6	Nitrophenol (mixed isomers)
554-84-7	m-Nitrophenol
100-02-7	p-Nitrophenol
88-75-5	2-Nitrophenol
100-02-7	4-Nitrophenol
	Nitrophenols
79-46-9	2-Nitropropane
	Nitrosamines
924-16-3	N-Nitrosodi-n-butylamine
1116-54-7	N-Nitrosodiethanolamine
55-18-5	N-Nitrosodiethylamine
62-75-9	N-Nitrosodimethylamine
62-75-9	Nitrosodimethylamine
86-30-6	N-Nitrosodiphenylamine
156-10-5	p-Nitrosodiphenylamine
621-64-7	N-Nitrosodi-n-propylamine
759-73-9	N-Nitroso-N-ethylurea
684-93-5	N-Nitroso-N-methylurea
4549-40-0	N-Nitrosomethylvinylamine
59-89-2	N-Nitrosomorpholine
615-53-2	N-Nitroso-N-methylurethane
16543-55-8	N-Nitrosonornicotine
100-75-4	N-Nitrosopiperidine
930-55-2	N-Nitrosopyrrolidine
1321-12-6	Nitrotoluene
99-08-1	m-Nitrotoluene
88-72-2	o-Nitrotoluene
99-99-0	p-Nitrotoluene
99-55-8	5-Nitro-o-toluidine
991-42-4	Norbormide
2234-13-1	Octachloronaphthalene
	Organorhodium Complex (PMN-82-147)
20816-12-0	Osmium oxide OsO4 (T-4)-
20816-12-0	Osmium tetroxide
630-60-4	Ouabain
23135-22-0	Oxamyl
78-71-7	Oxetane, 3,3-bis(chloromethyl)-
75-21-8	Oxirane
2497-07-6	Oxydisulfoton
10028-15-6	Ozone

CAS Number	Chemical Name
30525-89-4	Paraformaldehyde
123-63-7	Paraldehyde
1910-42-5	Paraquat
2074-50-2	Paraquat methosulfate
56-38-2	Parathion
298-00-0	Parathion-methyl
12002-03-8	Paris green
1336-36-3	PCBs
82-68-8	PCNB
19624-22-7	Pentaborane
608-93-5	Pentachlorobenzene
76-01-7	Pentachloroethane
82-68-8	Pentachloronitrobenzene
87-86-5	PCP
87-86-5	Pentachlorophenol
2570-26-5	Pentadecylamine
504-60-9	1,3-Pentadiene
79-21-0	Peracetic acid
127-18-4	Perchloroethylene
594-42-3	Perchloromethylmercaptan
62-44-2	Phenacetin
85-01-8	Phenanthrene
108-95-2	Phenol
64-00-6	Phenol, 3-(1-methylethyl)-, methylcarbamat
4418-66-0	Phenol, 2,2'-thiobis[4-chloro-6-methyl-
58-36-6	Phenoxarsine, 10,10'-oxydi-
696-28-6	Phenyl dichloroarsine
106-50-3	p-Phenylenediamine
59-88-1	Phenylhydrazine hydrochloride
62-38-4	Phenylmercuric acetate
62-38-4	Phenylmercury acetate
90-43-7	2-Phenylphenol
2097-19-0	Phenylsilatrane
103-85-5	Phenylthiourea
298-02-2	Phorate
4104-14-7	Phosacetim
947-02-4	Phosfolan
75-44-5	Phosgene
732-11-6	Phosmet
13171-21-6	Phosphamidon
7803-51-2	Phosphine
2703-13-1	Phosphonothioic acid, methyl-, O-ethyl O-(
50782-69-9	Phosphonothioic acid, methyl-, S-(2-(bis(1
2665-30-7	Phosphonothioic acid, methyl-, O-(4-nitrop
7664-38-2	Phosphoric acid
3254-63-5	Phosphoric acid, dimethyl 4-(methylthio) p
2587-90-8	Phosphorothioic acid, O,O-dimethyl-S-(2-(m
7723-14-0	Phosphorus (yellow or white)
7723-14-0	Phosphorus
10025-87-3	Phosphorus oxychloride

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

CAS Number	Chemical Name
10026-13-8	Phosphorus pentachloride
1314-56-3	Phosphorus pentoxide
7719-12-2	Phosphorus trichloride
	Phthalate Esters
85-44-9	Phthalic anhydride
57-47-6	Physostigmine
57-64-7	Physostigmine, salicylate (1:1)
109-06-8	2-Picoline
88-89-1	Picric acid
124-87-8	Picrotoxin
110-89-4	Piperidine
23505-41-1	Pirimifos-ethyl
	Polybrominated Biphenyls (PBBs)
1336-36-3	Polychlorinated biphenyls
	Polycyclic organic matter
	Polynuclear Aromatic Hydrocarbons
7784-41-0	Potassium arsenate
10124-50-2	Potassium arsenite
7778-50-9	Potassium bichromate
7789-00-6	Potassium chromate
151-50-8	Potassium cyanide
1310-58-3	Potassium hydroxide
7722-64-7	Potassium permanganate
506-61-6	Potassium silver cyanide
2631-37-0	Promecarb
78-87-5	Propane 1,2-dichloro-
1120-71-4	1,3-Propane sultone
1120-71-4	Propane sultone
2312-35-8	Propargite
107-19-7	Propargyl alcohol
106-96-7	Propargyl bromide
57-57-8	beta-Propiolactone
123-38-6	Propionaldehyde
79-09-4	Propionic acid
123-62-6	Propionic anhydride
107-12-0	Propionitrile
542-76-7	Propionitrile, 3-chloro-
70-69-9	Propiophenone, 4'-amino
114-26-1	Propoxur
109-61-5	Propyl chloroformate
107-10-8	*n*-Propylamine
115-07-1	Propylene (Propene)
75-55-8	Propyleneimine
75-56-9	Propylene oxide
621-64-7	Di-n-propylnitrosamine
2275-18-5	Prothoate
129-00-0	Pyrene
121-29-9	Pyrethrins
121-21-1	Pyrethrins
8003-34-7	Pyrethrins
110-86-1	Pyridine
504-24-5	Pyridine, 4-amino-
54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)
140-76-1	Pyridine, 2-methyl-5-vinyl-
1124-33-0	Pyridine, 4-nitro-, 1-oxide
53558-25-1	Pyriminil
91-22-5	Quinoline
106-51-[illegible]	Quinone
82-68-8	Quintozene
50-55-5	Reserpine
108-46-3	Resorcinol
81-07-2	Saccharin (manufacturing)
81-07-2	Saccharin and salts
94-59-7	Safrole
14167-18-1	Salcomine
107-44-8	Sarin
7783-00-8	Selenious acid
12039-52-0	Selenious acid, dithallium(1+) salt
7782-49-2	Selenium
	Selenium Compounds
7446-08-4	Selenium dioxide
7791-23-3	Selenium oxychloride
7488-56-4	Selenium sulfide
630-10-4	Selenourea
563-41-7	Semicarbazide hydrochloride
3037-72-7	Silane, (4-aminobutyl)diethoxymethyl-
7440-22-4	Silver
	Silver Compounds
506-64-9	Silver cyanide
7761-88-8	Silver nitrate
93-72-1	Silvex (2,4,5-TP)
7440-23-5	Sodium
7631-89-2	Sodium arsenate
7784-46-5	Sodium arsenite
26628-22-8	Sodium azide (Na(N3))
10588-01-9	Sodium bichromate
1333-83-1	Sodium bifluoride
7631-90-5	Sodium bisulfite
124-65-2	Sodium cacodylate
7775-11-3	Sodium chromate
143-33-9	Sodium cyanide (Na(CN))
25155-30-0	Sodium dodecylbenzenesulfonate
7681-49-4	Sodium fluoride
62-74-8	Sodium fluoroacetate
16721-80-5	Sodium hydrosulfide
1310-73-2	Sodium hydroxide
7681-52-9	Sodium hypochlorite
10022-70-5	Sodium hypochlorite
124-41-4	Sodium methylate
7632-00-0	Sodium nitrite

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

CAS Number	Chemical Name	CAS Number	Chemical Name
7558-79-4	Sodium phosphate, dibasic	58-90-2	2,3,4,6-Tetrachlorophenol
10039-32-4	Sodium phosphate, dibasic	961-11-5	Tetrachlorvinphos
10140-65-5	Sodium phosphate, dibasic	3689-24-5	Tetraethyldithiopyrophosphate
7601-54-9	Sodium phosphate, tribasic	78-00-2	Tetraethyl lead
7758-29-4	Sodium phosphate, tribasic	107-49-3	Tetraethyl pyrophosphate
7785-84-4	Sodium phosphate, tribasic	597-64-8	Tetraethyltin
10101-89-0	Sodium phosphate, tribasic	75-74-1	Tetramethyllead
10124-56-8	Sodium phosphate, tribasic	509-14-8	Tetranitromethane
10361-89-4	Sodium phosphate, tribasic	1314-32-5	Thallic oxide
13410-01-0	Sodium selenate	7440-28-0	Thallium
10102-18-8	Sodium selenite		Thallium Compounds
7782-82-3	Sodium selenite	563-68-8	Thallium(I) acetate
10102-20-2	Sodium tellurite	6533-73-9	Thallium(I) carbonate
900-95-8	Stannane, acetoxytriphenyl-	7791-12-0	Thallium chloride TlCl
7789-06-2	Strontium chromate	10102-45-1	Thallium(I) nitrate
57-24-9	Strychnine	10031-59-1	Thallium sulfate
57-24-9	Strychnine, and salts	7446-18-6	Thallium(I) sulfate
60-41-3	Strychnine, sulfate	6533-73-9	Thallous carbonate
100-42-5	Styrene	7791-12-0	Thallous chloride
96-09-3	Styrene oxide	2757-18-8	Thallous malonate
3689-24-5	Sulfotep	7446-18-6	Thallous sulfate
3569-57-1	Sulfoxide, 3-chloropropyl octyl	62-55-5	Thioacetamide
7446-09-5	Sulfur dioxide	2231-57-4	Thiocarbazide
7664-93-9	Sulfuric acid	139-65-1	4,4'-Thiodianiline
8014-95-7	Sulfuric acid (fuming)	39196-18-4	Thiofanox
12771-08-3	Sulfur monochloride	74-93-1	Thiomethanol
1314-80-3	Sulfur phosphide	297-97-2	Thionazin
7783-60-0	Sulfur tetrafluoride	108-98-5	Thiophenol
7446-11-9	Sulfur trioxide	79-19-6	Thiosemicarbazide
93-76-5	2,4,5-T acid	62-56-6	Thiourea
2008-46-0	2,4,5-T amines	5344-82-1	Thiourea, (2-chlorophenyl)-
1319-72-8	2,4,5-T amines	614-78-8	Thiourea, (2-methylphenyl)-
3813-14-7	2,4,5-T amines	86-88-4	Thiourea, 1-naphthalenyl-
6369-96-6	2,4,5-T amines	137-26-8	Thiram
6369-97-7	2,4,5-T amines	1314-20-1	Thorium dioxide
93-79-8	2,4,5-T esters	7550-45-0	Titanium tetrachloride
1928-47-8	2,4,5-T esters	119-93-7	o-Tolidine
2545-59-7	2,4,5-T esters	108-88-3	Toluene
25168-15-4	2,4,5-T esters	25376-45-8	Toluenediamine
61792-07-2	2,4,5-T esters	91-08-7	Toluene-2,6-diisocyanate
13560-99-1	2,4,5-T salts	584-84-9	Toluene-2,4-diisocyanate
77-81-6	Tabun	26471-62-5	Toluenediisocyanate (mixed isomers)
13494-80-9	Tellurium	95-53-4	o-Toluidine
7783-80-4	Tellurium hexafluoride	106-49-0	p-Toluidine
107-49-3	Tepp	636-21-5	o-Toluidine hydrochloride
13071-79-9	Terbufos	8001-35-2	Toxaphene
95-94-3	1,2,4,5-Tetrachlorobenzene	32534-95-5	2,4,5-TP esters
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1031-47-6	Triamiphos
79-34-5	1,1,2,2-Tetrachloroethane	68-76-8	Triaziquone
127-18-4	Tetrachloroethylene	24017-47-8	Triazofos

ALPHABETICAL LISTING OF CHEMICAL NAME AND CAS NUMBER

CAS Number	Chemical Name
75-25-2	Tribromomethane
52-68-6	Trichlorfon
76-02-8	Trichloroacetyl chloride
120-82-1	1,2,4-Trichlorobenzene
1558-25-4	Trichloro(chloromethyl)silane
27137-85-5	Trichloro(dichlorophenyl)silane
71-55-6	1,1,1-Trichloroethane
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
115-21-9	Trichloroethylsilane
75-69-4	Trichlorofluoromethane [CFC-11]
594-42-3	Trichloromethanesulfenyl chloride
75-69-4	Trichloromonofluoromethane
327-98-0	Trichloronate
25167-82-2	Trichlorophenol
15950-66-0	2,3,4-Trichlorophenol
933-78-8	2,3,5-Trichlorophenol
933-75-5	2,3,6-Trichlorophenol
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
609-19-8	3,4,5-Trichlorophenol
98-13-5	Trichlorophenylsilane
27323-41-7	Triethanolamine dodecylbenzene sulfonate
998-30-1	Triethoxysilane
121-44-8	Triethylamine
1582-09-8	Trifluralin
75-50-3	Trimethylamine
95-63-6	1,2,4-Trimethylbenzene
75-77-4	Trimethylchlorosilane
824-11-3	Trimethylolpropane phosphite
540-84-1	2,2,4-Trimethylpentane
1066-45-1	Trimethyltin chloride
99-35-4	1,3,5-Trinitrobenzene
639-58-7	Triphenyltin chloride
555-77-1	Tris(2-chloroethyl)amine
126-72-7	Tris(2,3-dibromopropyl) phosphate
72-57-1	Trypan blue
66-75-1	Uracil mustard
541-09-3	Uranyl acetate
10102-06-4	Uranyl nitrate
36478-76-9	Uranyl nitrate
51-79-6	Urethane
2001-95-8	Valinomycin
7440-62-2	Vanadium (fume or dust)
1314-62-1	Vanadium pentoxide
27774-13-6	Vanadyl sulfate
108-05-4	Vinyl acetate monomer
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride
81-81-2	Warfarin
81-81-2	Warfarin, & salts, conc.>0.3%
129-06-6	Warfarin sodium
108-38-3	m-Xylene
95-47-6	o-Xylene
106-42-3	p-Xylene
1330-20-7	Xylene (mixed isomers)
1300-71-6	Xylenol
87-62-7	2,6-Xylidine
28347-13-9	Xylylene dichloride
7440-66-6	Zinc (fume or dust)
7440-66-6	Zinc
	Zinc Compounds
557-34-6	Zinc acetate
52628-25-8	Zinc ammonium chloride
14639-97-5	Zinc ammonium chloride
14639-98-6	Zinc ammonium chloride
1332-07-6	Zinc borate
7699-45-8	Zinc bromide
3486-35-9	Zinc carbonate
7646-85-7	Zinc chloride
557-21-1	Zinc cyanide
58270-08-9	Zinc, dichloro(4,4-dimethyl-5((((methylami
7783-49-5	Zinc fluoride
557-41-5	Zinc formate
7779-86-4	Zinc hydrosulfite
7779-88-6	Zinc nitrate
127-82-2	Zinc phenolsulfonate
1314-84-7	Zinc phosphide
1314-84-7	Zinc phosphide (conc. <= 10%)
1314-84-7	Zinc phosphide (conc. > 10%)
16871-71-9	Zinc silicofluoride
7733-02-0	Zinc sulfate
12122-67-7	Zineb
13746-89-9	Zirconium nitrate
16923-95-8	Zirconium potassium fluoride
14644-61-2	Zirconium sulfate
10026-11-6	Zirconium tetrachloride

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FOR REFERENCE ONLY, NOT FOR REGULATORY COMPLIANCE

SEE 40 CFR PART 302, TABLE 302.4, APPENDIX B, FOR MORE INFORMATION

Radionuclide Name	Atomic Number	RQ (curies)
Radionuclides (unlisted)		1
Actinium-224	89	100
Actinium-225	89	1
Actinium-225	89	1
Actinium-226	89	10
Actinium-227	89	0.001
Actinium-228	89	10
Aluminum-026	13	10
Americium-237	95	1000
Americium-238	95	100
Americium-239	95	100
Americium-240	95	10
Americium-241	95	0.01
Americium-242	95	100
Americium-242m	95	0.01
Americium-243	95	0.01
Americium-244	95	10
Americium-244m	95	1000
Americium-245	95	1000
Americium-246	95	1000
Americium-246m	95	1000
Antimony-115	51	1000
Antimony-116	51	1000
Antimony-116m	51	100
Antimony-117	51	1000
Antimony-118m	51	10
Antimony-119	51	1000
Antimony-120 (16 min)	51	1000
Antimony-120 (5.76 day)	51	10
Antimony-122	51	10
Antimony-124	51	10
Antimony-124m	51	1000
Antimony-125	51	10
Antimony-126	51	10
Antimony-126m	51	1000
Antimony-127	51	10
Antimony-128 (10.4 min)	51	1000
Antimony-128 (9.01 hours)	51	10
Antimony-129	51	100
Antimony-130	51	100
Antimony-131	51	1000
Argon-039	18	1000
Argon-041	18	10
Arsenic-069	33	1000
Arsenic-070	33	100
Arsenic-071	33	100
Arsenic-072	33	10
Arsenic-073	33	100
Arsenic-074	33	10
Arsenic-076	33	100
Arsenic-077	33	1000
Arsenic-078	33	100
Astatine-207	85	100
Astatine-211	85	100
Barium-126	56	1000
Barium-128	56	10
Barium-131	56	10
Barium-131m	56	1000
Barium-133	56	10
Barium-133m	56	100
Barium-135m	56	1000
Barium-139	56	1000
Barium-140	56	10
Barium-141	56	1000
Barium-142	56	1000
Berkelium-245	97	100
Berkelium-246	97	10
Berkelium-247	97	0.01
Berkelium-249	97	1
Berkelium-250	97	100
Beryllium-007	4	100
Beryllium-010	4	1
Bismuth-200	83	100
Bismuth-201	83	100
Bismuth-202	83	1000
Bismuth-203	83	10
Bismuth-205	83	10
Bismuth-206	83	10
Bismuth-207	83	10
Bismuth-210	83	10
Bismuth-210m	83	0.1
Bismuth-212	83	100
Bismuth-213	83	100
Bismuth-214	83	100
Bromine-074	35	100
Bromine-074m	35	100
Bromine-075	35	100
Bromine-076	35	10
Bromine-077	35	100
Bromine-080	35	1000
Bromine-080m	35	1000
Bromine-082	35	10
Bromine-083	35	1000
Bromine-084	35	100
Cadmium-104	48	1000
Cadmium-107	48	1000
Cadmium-109	48	1
Cadmium-113	48	0.1
Cadmium-113m	48	0.1
Cadmium-115	48	100

RADIONUCLIDES LISTED UNDER CERCLA
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SEE 40 CFR PART 302, TABLE 302.4, APPENDIX B, FOR MORE INFORMATION

Radionuclide Name	Atomic Number	RQ (curies)
Cadmium-115m	48	10
Cadmium-117	48	100
Cadmium-117m	48	10
Calcium-041	20	10
Calcium-045	20	10
Calcium-047	20	10
Californium-244	98	1000
Californium-246	98	10
Californium-248	98	0.1
Californium-249	98	0.01
Californium-250	98	0.01
Californium-251	98	0.01
Californium-252	98	0.1
Californium-253	98	10
Californium-254	98	0.1
Carbon-011	6	1000
Carbon-014	6	10
Cerium-134	58	10
Cerium-135	58	10
Cerium-137	58	1000
Cerium-137m	58	100
Cerium-139	58	100
Cerium-141	58	10
Cerium-143	58	100
Cerium-144	58	1
Cesium-125	55	1000
Cesium-127	55	100
Cesium-129	55	100
Cesium-130	55	1000
Cesium-131	55	1000
Cesium-132	55	10
Cesium-134	55	1
Cesium-134m	55	1000
Cesium-135	55	10
Cesium-135m	55	100
Cesium-136	55	10
Cesium-137	55	1
Cesium-138	55	100
Chlorine-036	17	10
Chlorine-038	17	100
Chlorine-039	17	100
Chromium-048	24	100
Chromium-049	24	1000
Chromium-051	24	1000
Cobalt-055	27	10
Cobalt-056	27	10
Cobalt-057	27	100
Cobalt-058	27	10
Cobalt-058m	27	1000
Cobalt-060	27	10

Radionuclide Name	Atomic Number	RQ (curies)
Cobalt-060m	27	1000
Cobalt-061	27	1000
Cobalt-062m	27	1000
Copper-060	29	100
Copper-061	29	100
Copper-064	29	1000
Copper-067	29	100
Curium-238	96	1000
Curium-240	96	1
Curium-241	96	10
Curium-242	96	1
Curium-243	96	0.01
Curium-244	96	0.01
Curium-245	96	0.01
Curium-246	96	0.01
Curium-247	96	0.01
Curium-248	96	0.001
Curium-249	96	1000
Dysprosium-155	66	100
Dysprosium-157	66	100
Dysprosium-159	66	100
Dysprosium-165	66	1000
Dysprosium-166	66	10
Einsteinium-250	99	10
Einsteinium-251	99	1000
Einsteinium-253	99	10
Einsteinium-254	99	0.1
Einsteinium-254m	99	1
Erbium-161	68	100
Erbium-165	68	1000
Erbium-169	68	100
Erbium-171	68	100
Erbium-172	68	10
Europium-145	63	10
Europium-146	63	10
Europium-147	63	10
Europium-148	63	10
Europium-149	63	100
Europium-150	63	1000
Europium-150	63	10
Europium-152	63	10
Europium-152m	63	100
Europium-154	63	10
Europium-155	63	10
Europium-156	63	10
Europium-157	63	10
Europium-158	63	1000
Fermium-252	100	10
Fermium-253	100	10
Fermium-254	100	100

RADIONUCLIDES LISTED UNDER CERCLA
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SEE 40 CFR PART 302, TABLE 302.4, APPENDIX B, FOR MORE INFORMATION

Radionuclide Name	Atomic Number	RQ (curies)	Radionuclide Name	Atomic Number	RQ (curies)
Fermium-255	100	100	Hafnium-184	72	100
Fermium-257	100	100	Holmium-155	67	1000
Fluorine-018	9	1000	Holmium-157	67	1000
Francium-222	87	100	Holmium-159	67	1000
Francium-223	87	100	Holmium-161	67	1000
Gadolinium-145	64	100	Holmium-162	67	1000
Gadolinium-146	64	10	Holmium-162m	67	1000
Gadolinium-147	64	10	Holmium-164	67	1000
Gadolinium-148	64	0.001	Holmium-164m	67	1000
Gadolinium-149	64	100	Holmium-166	67	100
Gadolinium-151	64	100	Holmium-166m	67	1
Gadolinium-152	64	0.001	Holmium-167	67	100
Gadolinium-153	64	10	Hydrogen-003	1	100
Gadolinium-159	64	1000	Indium-109	49	100
Gallium-065	31	1000	Indium-110 (4.9 hours)	49	10
Gallium-066	31	10	Indium-110 (69.1 min)	49	100
Gallium-067	31	100	Indium-111	49	100
Gallium-068	31	1000	Indium-112	49	1000
Gallium-070	31	1000	Indium-113m	49	1000
Gallium-072	31	10	Indium-114m	49	10
Gallium-073	31	100	Indium-115	49	0.1
Germanium-066	32	100	Indium-115m	49	100
Germanium-067	32	1000	Indium-116m	49	100
Germanium-068	32	10	Indium-117	49	1000
Germanium-069	32	10	Indium-117m	49	100
Germanium-071	32	1000	Iodine-119m	53	1000
Germanium-075	32	1000	Iodine-120	53	10
Germanium-077	32	10	Iodine-120m	53	100
Germanium-078	32	1000	Iodine-121	53	100
Gold-193	79	100	Iodine-123	53	10
Gold-194	79	10	Iodine-124	53	0.1
Gold-195	79	100	Iodine-125	53	0.01
Gold-198	79	100	Iodine-126	53	0.01
Gold-198m	79	10	Iodine-128	53	1000
Gold-199	79	100	Iodine-129	53	0.001
Gold-200	79	1000	Iodine-130	53	1
Gold-200m	79	10	Iodine-131	53	0.01
Gold-201	79	1000	Iodine-132	53	10
Hafnium-170	72	100	Iodine-132m	53	10
Hafnium-172	72	1	Iodine-133	53	0.1
Hafnium-173	72	100	Iodine-134	53	100
Hafnium-175	72	100	Iodine-135	53	10
Hafnium-177m	72	1000	Iridium-182	77	1000
Hafnium-178m	72	0.1	Iridium-184	77	100
Hafnium-179m	72	100	Iridium-185	77	100
Hafnium-180m	72	100	Iridium-186	77	10
Hafnium-181	72	10	Iridium-187	77	100
Hafnium-182	72	0.1	Iridium-188	77	10
Hafnium-182m	72	100	Iridium-189	77	100
Hafnium-183	72	100	Iridium-190	77	10

Radionuclide Name	Atomic Number	RQ (curies)
Iridium-190m	77	1000
Iridium-192	77	10
Iridium-192m	77	100
Iridium-194	77	100
Iridium-194m	77	10
Iridium-195	77	1000
Iridium-195m	77	100
Iron-052	26	100
Iron-055	26	100
Iron-059	26	10
Iron-060	26	0.1
Krypton-074	36	10
Krypton-076	36	10
Krypton-077	36	10
Krypton-079	36	100
Krypton-081	36	1000
Krypton-083m	36	1000
Krypton-085	36	1000
Krypton-085m	36	100
Krypton-087	36	10
Krypton-088	36	10
Lanthanum-131	57	1000
Lanthanum-132	57	100
Lanthanum-135	57	1000
Lanthanum-137	57	10
Lanthanum-138	57	1
Lanthanum-140	57	10
Lanthanum-141	57	1000
Lanthanum-142	57	100
Lanthanum-143	57	1000
Lead-195m	82	1000
Lead-198	82	100
Lead-199	82	100
Lead-200	82	100
Lead-201	82	100
Lead-202	82	1
Lead-202m	82	10
Lead-203	82	100
Lead-205	82	100
Lead-209	82	1000
Lead-210	82	0.01
Lead-211	82	100
Lead-212	82	10
Lead-214	82	100
Lutetium-169	71	10
Lutetium-170	71	10
Lutetium-171	71	10
Lutetium-172	71	10
Lutetium-173	71	100
Lutetium-174	71	10
Lutetium-174m	71	10
Lutetium-176	71	1
Lutetium-176m	71	1000
Lutetium-177	71	100
Lutetium-177m	71	10
Lutetium-178	71	1000
Lutetium-178m	71	1000
Lutetium-179	71	1000
Magnesium-028	12	10
Manganese-051	25	1000
Manganese-052	25	10
Manganese-053	25	1000
Manganese-054	25	10
Manganese-056	25	100
Manganese-052m	25	1000
Mendelevium-257	101	100
Mendelevium-258	101	1
Mercury-193	80	100
Mercury-193m	80	10
Mercury-194	80	0.1
Mercury-195	80	100
Mercury-195m	80	100
Mercury-197	80	1000
Mercury-197m	80	1000
Mercury-199m	80	1000
Mercury-203	80	10
Molybdenum-090	42	100
Molybdenum-093	42	100
Molybdenum-093m	42	10
Molybdenum-099	42	100
Molybdenum-101	42	1000
Neodymium-136	60	1000
Neodymium-138	60	1000
Neodymium-139	60	1000
Neodymium-139m	60	100
Neodymium-141	60	1000
Neodymium-147	60	10
Neodymium-149	60	100
Neodymium-151	60	1000
Neptunium-232	93	1000
Neptunium-233	93	1000
Neptunium-234	93	10
Neptunium-235	93	1000
Neptunium-236 (1.2 e 5 yr)	93	0.1
Neptunium-236 (22.5 hours)	93	100
Neptunium-237	93	0.01
Neptunium-238	93	10
Neptunium-239	93	100
Neptunium-240	93	100
Nickel-056	28	10

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Radionuclide Name	Atomic Number	RQ (curies)
Nickel-057	28	10
Nickel-059	28	100
Nickel-063	28	100
Nickel-065	28	100
Nickel-066	28	10
Niobium-088	41	100
Niobium-089 (122 minutes)	41	100
Niobium-089 (66 minutes)	41	100
Niobium-090	41	10
Niobium-093m	41	100
Niobium-094	41	10
Niobium-095	41	10
Niobium-095m	41	100
Niobium-096	41	10
Niobium-097	41	100
Niobium-098	41	1000
Osmium-180	76	1000
Osmium-181	76	100
Osmium-182	76	100
Osmium-185	76	10
Osmium-189m	76	1000
Osmium-191	76	100
Osmium-191m	76	1000
Osmium-193	76	100
Osmium-194	76	1
Palladium-100	46	100
Palladium-101	46	100
Palladium-103	46	100
Palladium-107	46	100
Palladium-109	46	1000
Phosphorus-032	15	0.1
Phosphorus-033	15	1
Platinum-186	78	100
Platinum-188	78	100
Platinum-189	78	100
Platinum-191	78	100
Platinum-193	78	1000
Platinum-193m	78	100
Platinum-195m	78	100
Platinum-197	78	1000
Platinum-197m	78	1000
Platinum-199	78	1000
Platinum-200	78	100
Plutonium-234	94	1000
Plutonium-235	94	1000
Plutonium-236	94	0.1
Plutonium-237	94	1000
Plutonium-238	94	0.01
Plutonium-239	94	0.01
Plutonium-240	94	0.01
Plutonium-241	94	1
Plutonium-242	94	0.01
Plutonium-243	94	1000
Plutonium-244	94	0.01
Plutonium-245	94	100
Polonium-203	84	100
Polonium-205	84	100
Polonium-207	84	10
Polonium-210	84	0.01
Potassium-040	19	1
Potassium-042	19	100
Potassium-043	19	10
Potassium-044	19	100
Potassium-045	19	1000
Praseodymium-136	59	1000
Praseodymium-137	59	1000
Praseodymium-138m	59	100
Praseodymium-139	59	1000
Praseodymium-142	59	100
Praseodymium-142m	59	1000
Praseodymium-143	59	10
Praseodymium-144	59	1000
Praseodymium-145	59	1000
Praseodymium-147	59	1000
Promethium-141	61	1000
Promethium-143	61	100
Promethium-144	61	10
Promethium-145	61	100
Promethium-146	61	10
Promethium-147	61	10
Promethium-148	61	10
Promethium-148m	61	10
Promethium-149	61	100
Promethium-150	61	100
Promethium-151	61	100
Protactinium-227	91	100
Protactinium-228	91	10
Protactinium-230	91	10
Protactinium-231	91	0.01
Protactinium-232	91	10
Protactinium-233	91	100
Protactinium-234	91	10
Radium-223	88	1
Radium-224	88	10
Radium-225	88	1
Radium-226	88	0.1
Radium-227	88	1000
Radium-228	88	0.1
Radon-220	86	0.1
Radon-222	86	0.1

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SEE 40 CFR PART 302, TABLE 302.4, APPENDIX B, FOR MORE INFORMATION

Radionuclide Name	Atomic Number	RQ (curies)
Rhenium-177	75	1000
Rhenium-178	75	1000
Rhenium-181	75	100
Rhenium-182 (12.7 hours)	75	10
Rhenium-182 (64.0 hours)	75	10
Rhenium-184	75	10
Rhenium-184m	75	10
Rhenium-186	75	100
Rhenium-186m	75	10
Rhenium-187	75	1000
Rhenium-188	75	1000
Rhenium-188m	75	1000
Rhenium-189	75	1000
Rhodium-099	45	10
Rhodium-099m	45	100
Rhodium-100	45	10
Rhodium-101	45	10
Rhodium-101m	45	100
Rhodium-102	45	10
Rhodium-102m	45	10
Rhodium-103m	45	1000
Rhodium-105	45	100
Rhodium-106m	45	10
Rhodium-107	45	1000
Rubidium-079	37	1000
Rubidium-081	37	100
Rubidium-081m	37	1000
Rubidium-082m	37	10
Rubidium-083	37	10
Rubidium-084	37	10
Rubidium-086	37	10
Rubidium-087	37	10
Rubidium-088	37	1000
Rubidium-089	37	1000
Ruthenium-094	44	1000
Ruthenium-097	44	100
Ruthenium-103	44	10
Ruthenium-105	44	100
Ruthenium-106	44	1
Samarium-141	62	1000
Samarium-141m	62	1000
Samarium-142	62	1000
Samarium-145	62	100
Samarium-146	62	0.01
Samarium-147	62	0.01
Samarium-151	62	10
Samarium-153	62	100
Samarium-155	62	1000
Samarium-156	62	100
Scandium-043	21	1000
Scandium-044	21	100
Scandium-044m	21	10
Scandium-046	21	10
Scandium-047	21	100
Scandium-048	21	10
Scandium-049	21	1000
Selenium-070	34	1000
Selenium-073	34	10
Selenium-073m	34	100
Selenium-075	34	10
Selenium-079	34	10
Selenium-081	34	1000
Selenium-081m	34	1000
Selenium-083	34	1000
Silicon-031	14	1000
Silicon-032	14	1
Silver-102	47	100
Silver-103	47	1000
Silver-104	47	1000
Silver-104m	47	1000
Silver-105	47	10
Silver-106	47	1000
Silver-106m	47	10
Silver-108m	47	10
Silver-110m	47	10
Silver-111	47	10
Silver-112	47	100
Silver-115	47	1000
Sodium-022	11	10
Sodium-024	11	10
Strontium-080	38	100
Strontium-081	38	1000
Strontium-083	38	100
Strontium-085	38	10
Strontium-085m	38	1000
Strontium-087m	38	100
Strontium-089	38	10
Strontium-090	38	0.1
Strontium-091	38	10
Strontium-092	38	100
Sulfur-035	16	1
Tantalum-172	73	100
Tantalum-173	73	100
Tantalum-174	73	100
Tantalum-175	73	100
Tantalum-176	73	10
Tantalum-177	73	1000
Tantalum-178	73	1000
Tantalum-179	73	1000
Tantalum-180	73	100

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Radionuclide Name	Atomic Number	RQ (curies)	Radionuclide Name	Atomic Number	RQ (curies)
Tantalum-180m	73	1000	Thallium-194	81	1000
Tantalum-182	73	10	Thallium-194m	81	100
Tantalum-182m	73	1000	Thallium-195	81	100
Tantalum-183	73	100	Thallium-197	81	100
Tantalum-184	73	10	Thallium-198	81	10
Tantalum-185	73	1000	Thallium-198m	81	100
Tantalum-186	73	1000	Thallium-199	81	100
Technetium-093	43	100	Thallium-200	81	10
Technetium-093m	43	1000	Thallium-201	81	1000
Technetium-094	43	10	Thallium-202	81	10
Technetium-094m	43	100	Thallium-204	81	10
Technetium-096	43	10	Thorium-226	90	100
Technetium-096m	43	1000	Thorium-227	90	1
Technetium-097	43	100	Thorium-228	90	0.01
Technetium-097m	43	100	Thorium-229	90	0.001
Technetium-098	43	10	Thorium-230	90	0.01
Technetium-099	43	10	Thorium-231	90	100
Technetium-099m	43	100	Thorium-232	90	0.001
Technetium-101	43	1000	Thorium-234	90	100
Technetium-104	43	1000	Thulium-162	69	1000
Tellurium-116	52	1000	Thulium-166	69	10
Tellurium-121	52	10	Thulium-167	69	100
Tellurium-121m	52	10	Thulium-170	69	10
Tellurium-123	52	10	Thulium-171	69	100
Tellurium-123m	52	10	Thulium-172	69	100
Tellurium-125m	52	10	Thulium-173	69	100
Tellurium-127	52	1000	Thulium-175	69	1000
Tellurium-127m	52	10	Tin-110	50	100
Tellurium-129	52	1000	Tin-111	50	1000
Tellurium-129m	52	10	Tin-113	50	10
Tellurium-131	52	1000	Tin-117m	50	100
Tellurium-131m	52	10	Tin-119m	50	10
Tellurium-132	52	10	Tin-121	50	1000
Tellurium-133	52	1000	Tin-121m	50	10
Tellurium-133m	52	1000	Tin-123	50	10
Tellurium-134	52	1000	Tin-123m	50	1000
Terbium-147	65	100	Tin-125	50	10
Terbium-149	65	100	Tin-126	50	1
Terbium-150	65	100	Tin-127	50	100
Terbium-151	65	10	Tin-128	50	1000
Terbium-153	65	100	Titanium-044	22	1
Terbium-154	65	10	Titanium-045	22	1000
Terbium-155	65	100	Tungsten-176	74	1000
Terbium-156	65	10	Tungsten-177	74	100
Terbium-156m (24.4 hours)	65	1000	Tungsten-178	74	100
Terbium-156m (5.0 hours)	65	1000	Tungsten-179	74	1000
Terbium-157	65	100	Tungsten-181	74	100
Terbium-158	65	10	Tungsten-185	74	10
Terbium-160	65	10	Tungsten-187	74	100
Terbium-161	65	100	Tungsten-188	74	10

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Radionuclide Name	Atomic Number	RQ (curies)
Uranium-230	92	1
Uranium-231	92	1000
Uranium-232	92	0.01
Uranium-233	92	0.1
Uranium-234	92	0.1
Uranium-235	92	0.1
Uranium-236	92	0.1
Uranium-237	92	100
Uranium-238	92	0.1
Uranium-239	92	1000
Uranium-240	92	1000
Vanadium-047	23	1000
Vanadium-048	23	10
Vanadium-049	23	1000
Xenon-120	54	100
Xenon-121	54	10
Xenon-122	54	100
Xenon-123	54	10
Xenon-125	54	100
Xenon-127	54	100
Xenon-129m	54	1000
Xenon-131m	54	1000
Xenon-133	54	1000
Xenon-133m	54	1000
Xenon-135	54	100
Xenon-135m	54	10
Xenon-138	54	10
Ytterbium-162	70	1000
Ytterbium-166	70	10
Ytterbium-167	70	1000
Ytterbium-169	70	10
Ytterbium-175	70	100
Ytterbium-177	70	1000
Ytterbium-178	70	1000
Yttrium-086	39	10
Yttrium-086m	39	1000
Yttrium-087	39	10
Yttrium-088	39	10
Yttrium-090	39	10
Yttrium-090m	39	100
Yttrium-091	39	10
Yttrium-091m	39	1000
Yttrium-092	39	100
Yttrium-093	39	100
Yttrium-094	39	1000
Yttrium-095	39	1000
Zinc-062	30	100
Zinc-063	30	1000
Zinc-065	30	10
Zinc-069	30	1000
Zinc-069m	30	100
Zinc-071m	30	100
Zinc-072	30	100
Zirconium-086	40	100
Zirconium-088	40	10
Zirconium-089	40	100
Zirconium-093	40	1
Zirconium-095	40	10
Zirconium-097	40	10

NOTES:

m - Signifies a nuclear isomer which is a radionuclide in a higher energy metastable state relative to the parent isotope.

Final RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

An adjusted RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in the SARA Title III Consolidated List and this list are in conflict, the lowest RQ applies.

Notification requirements for releases of mixtures or solutions of radionuclides can be found in 40 CFR section 302.6(b).

01/31/92 RCRA WASTE STREAMS AND UNLISTED HAZARDOUS WASTES Page : 1

THE DESCRIPTIONS OF THE WASTE STREAMS HAVE BEEN TRUNCATED.

THIS LIST SHOULD BE USED FOR REFERENCE ONLY.

COMPLIANCE INFORMATION CAN BE FOUND IN 40 CFR PART 302 AND TABLE 302.4.

RCRA Code	Description	RQ (lbs)
F001	Spent halogenated solvents used in degreasing:	10
	Tetrachloroethylene (CAS No. 127-18-4, RCRA Waste No. U210)	100
	Trichloroethylene (CAS No. 79-01-6, RCRA Waste No. U228)	100
	Methylene chloride (CAS No. 75-09-2, RCRA Waste No. U080)	1000
	1,1,1-Trichloroethane (CAS No. 71-55-6, RCRA Waste No. U226)	1000
	Carbon tetrachloride (CAS No. 56-23-5, RCRA Waste No. U211)	5000
	Chlorinated fluorocarbons	10
F002	Spent halogenated solvents:	10
	Tetrachloroethylene (CAS No. 127-18-4, RCRA Waste No. U210)	100
	Methylene chloride (CAS No. 75-09-2, RCRA Waste No. U080)	1000
	Trichloroethylene (CAS No. 79-01-6, RCRA Waste No. U228)	100
	1,1,1-Trichloroethane (CAS No. 71-55-6, RCRA Waste No. U226)	1000
	Chlorobenzene (CAS No. 108-90-7, RCRA Waste No. U037)	100
	1,1,2-Trichloro-1,2,2-trifluoroethane (CAS No. 76-13-1)	5000
	o-Dichlorobenzene (CAS No. 95-50-1, RCRA Waste No. U070)	100
	Trichlorofluoromethane (CAS No. 75-69-4, RCRA Waste No. U121)	5000
	1,1,2-Trichloroethane (CAS No. 79-00-5, RCRA Waste No. U227)	100
F003	Spent non-halogenated solvents:	100
	Xylene (CAS No. 1330-20-7, RCRA Waste No. U239)	1000
	Acetone (CAS No. 67-64-1, RCRA Waste No. U002)	5000
	Ethyl acetate (CAS No. 141-78-6, RCRA Waste No. U112)	5000
	Ethylbenzene (CAS No. 100-41-4)	1000
	Ethyl ether (CAS No. 60-29-7, RCRA Waste No. U117)	100
	Methyl isobutyl ketone (CAS No. 108-10-1, RCRA Waste No. U161)	5000
	n-Butyl alcohol (CAS No. 71-36-3, RCRA Waste No. U031)	5000
	Cyclohexanone (CAS No. 108-94-1, RCRA Waste No. U057)	5000
	Methanol (CAS No. 67-56-1, RCRA Waste No. U154)	5000
F004	Spent non-halogenated solvents and still bttm. from cresol\nitrobenzene recovery	1000
	Cresols/cresylic acid (CAS No. 1319-77-3, RCRA Waste No. U052)	1000
	Nitrobenzene (CAS No. 98-95-3, RCRA Waste No. U169)	1000
F005	Spent non-halogenated solvents(still bttm.) toluene\methyl ethyl ketone recovery	100
	Toluene (CAS No. 108-88-3, RCRA Waste No. U220)	1000
	Methyl ethyl ketone (CAS No. 78-93-3, RCRA Waste No. U159)	5000
	Carbon disulfide (CAS No. 75-15-0, RCRA Waste No. P022)	100
	Isobutanol (CAS No. 78-83-1, RCRA Waste No. U140)	5000
	Pyridine (CAS No. 110-86-1, RCRA Waste No. U196)	1000
F006	Wastewater treatment sludges from electroplating operations	10
F007	Spent cyanide plating bath solns. from electroplating	10
F008	Plating bath residues from electroplating where cyanides are used	10
F009	Spent stripping/cleaning bath solns. from electroplating where cyanides are used	10
F010	Quenching bath residues from metal heat treating where cyanides are used	10
F011	Spent cyanide soln. from salt bath pot cleaning from metal heat treating	10
F012	Quenching wastewater sludges from metal heat treating where cyanides are used	10
F019	Wastewater treatment sludges from chemical conversion of aluminum coating	10
F020	Wastes from prod. or use of tri/tetrachlorophenol or derivatives	1
F021	Wastes from prod. or use of pentachlorophenol or intermediates	1
F022	Wastes from use of tetra/penta/hexachlorobenzenes	1
F023	Wastes from mat. prod. on equip. which prev. used tri\tetrachlorophenol	1
F024	Wastes from prod. of chlorinated aliphatic hydrocarbons (C1-C5)	1
F025	Lights ends, filters from prod. of chlorinated aliphatic hydrocarbons(C1-C5)	1

01/31/92

RCRA WASTE STREAMS AND UNLISTED HAZARDOUS WASTES
THE DESCRIPTIONS OF THE WASTE STREAMS HAVE BEEN TRUNCATED.
THIS LIST SHOULD BE USED FOR REFERENCE ONLY.
COMPLIANCE INFORMATION CAN BE FOUND IN 40 CFR PART 302 AND TABLE 302.4.

RCRA Code	Description	RQ (lbs)
F026	Waste from equipment previously used to prod. tetra/penta/hexachlorobenzenes	1
F027	Discarded wastes containing tetra/penta/hexachlorobenzenes or derivatives	1
F028	Residues from incineration of contaminated soils: F020,F021,F022,F023,F026,F027	1
F032	Wastewaters, process residuals from wood preserving using chlorophenolic solns.	1
F034	Wastewaters, process residuals from wood preserving using creosote formulations	1
F035	Wastewaters, process residuals from wood preserving using arsenic or chromium	1
F037	Petroleum refinery primary oil/water/solids separation sludge	1
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge	1
K001	Wastewater treatment sludge from creosote or pentachlorophenol wood preserving	1
K002	Wastewater treatment sludge from prod. of chrome yellow and orange pigments	1
K003	Wastewater treatment sludge from prod. of molybdate orange pigments	1
K004	Wastewater treatment sludge from prod. of zinc yellow pigments	10
K005	Wastewater treatment sludge from prod. of chrome green pigments	1
K006	Wastewater treatment sludge from prod. of chrome oxide green pigments anhydrous	10
K007	Wastewater treatment sludge from prod. of iron blue pigments	10
K008	Oven residue from prod. of chrome oxide green pigments	10
K009	Dist. bottoms from prod. of acetaldehyde from ethylene	10
K010	Dist. side cuts from prod. of acetaldehyde from ethylene	10
K011	Bottom stream from wastewater stripper in acrylonitrile prod.	10
K013	Bottom stream from acetonitrile column in acrylonitrile prod.	10
K014	Bottoms from acetonitrile purification column in acrylonitrile prod.	5000
K015	Still bottoms from the dist. of benzyl chloride	10
K016	Heavy ends or dist. residues from prod. of carbon tetrachloride	1
K017	Heavy ends from the purification column in epichlorohydrin prod.	10
K018	Heavy ends from the fractionation column in ethyl chloride prod.	1
K019	Heavy ends from the dist. of ethylene dichloride during its prod.	1
K020	Heavy ends from the dist. of vinyl chloride during prod. of the monomer	1
K021	Aqueous spent antimony catalyst waste from fluoromethanes prod.	10
K022	Dist. bottom tars from prod. of phenol/acetone from cumene	1
K023	Dist. light ends from prod. of phthalic anhydride from naphthalene	5000
K024	Dist. bottoms from prod. of phthalic anhydride from naphthalene	5000
K025	Dist. bottoms from prod. of nitrobenzene by nitration of benzene	10
K026	Stripping still tails from the prod. of methyl ethyl pyridines	1000
K027	Centrifuge/dist. residues from toluene diisocyanate prod.	10
K028	Spent catalyst from hydrochlorinator reactor in prod. of 1,1,1-trichloroethane	1
K029	Waste from product steam stripper in prod. of 1,1,1-trichloroethane	1
K030	Column bottoms(heavy ends) from prod. of trichloroethylene and perchloroethylene	1
K031	By-product salts generated in the prod. msma and cacodylic acid	1
K032	Wastewater treatment sludge from the prod. of chlordane	10
K033	Wastewaster/scrubwater from chlorination during prod. of chlordane	10
K034	Filter solids from filtration of hexachlorocyclopentadiene in chlordane prod.	10
K035	Wastewater treatment sludges from the prod. of creosote	1
K036	Still bottoms from toluene reclamation distillation in disulfoton prod.	1
K037	Wastewater treatment sludges from the prod. of disulfoton	1
K038	Wastewater from the washing and stripping of phorate production	10
K039	Filter cake from filtration during prod. of phorate	10
K040	Wastewater treatment sludge from the prod. of phorate	10
K041	Wastewater treatment sludge from the prod. of toxaphene	1
K042	Heavy ends from dist. of tetrachlorobenzene in the prod. of 2,4,5-T	10
K043	2,6-Dichlorophenol waste from the prod. of 2,4-D	10

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RCRA Code	Description	RQ (lbs)
K044	Wastewater treatment sludge from manuf. and processing of explosives	10
K045	Spent carbon from treatment of wastewater containing explosives	10
K046	Wastewater sludge from manuf.,formulating,loading of lead-based initiating compd	100
K047	Pink/red water from TNT operations	10
K048	Dissolved air flotation (DAF) float from the petroleum refining industry	1
K049	Slop oil emulsion solids from the petroleum refining industry	1
K050	Heat exchanger bundle cleaning sludge from petroleum refining industry	10
K051	API separator sludge from the petroleum refining industry	1
K052	Tank bottoms (leaded) from the petroleum refining industry	10
K060	Ammonia still lime sludge from coking operations	1
K061	Emission control dust/sludge from primary prod. of steel in electric furnaces	1
K062	Spent pickle liquor generated by steel finishing: (SIC codes 331 and 332)	1
K064	Acid plant blowdown sludge from blowdown slurry from primary copper prod.	1
K065	Surface impoundment solids at primary lead smelting facilities	1
K066	Sludge from treatment of wastewater(acid plant blowdown) from primary zinc prod.	1
K069	Emission control dust/sludge from secondary lead smelting	1
K071	Brine purification muds from mercury cell process in chlorine production	1
K073	Chlorinated hydrocarbon waste in chlorine production	10
K083	Distillation bottoms from aniline extraction	100
K084	Wastewater sludges from prod. of veterinary pharm. from arsenic compds.	1
K085	Distillation or fractionation column bottoms in prod. of chlorobenzenes	10
K086	Wastes/sludges from prod. of inks from chromium and lead compds.	1
K087	Decanter tank tar sludge from coking operations	100
K088	Spent potliners from primary aluminum reduction	1
K090	Emission control dust/sludge from ferrochromiumsilicon prod.	1
K091	Emission control dust/sludge from ferrochromium prod.	1
K093	Dist. light ends from prod. of phthalic anhydride by ortho-xylene	5000
K094	Dist. bottoms in prod. of phthalic anhydride by ortho-xylene	5000
K095	Distillation bottoms in prod. of 1,1,1-trichloroethane	100
K096	Heavy ends from dist. column in prod. of 1,1,1-trichloroethane	100
K097	Vacuum stripper discharge from the chlordane chlorinator in prod. of chlordane	1
K098	Untreated process wastewater from the prod. of toxaphene	1
K099	Untreated wastewater from the prod. of 2,4-D	10
K100	Waste leaching soln. from acid leaching of emission dust in 2nd lead smelting	1
K101	Dist. tar residue from aniline in prod. of veterinary pharm. from arsenic compd.	1
K102	Residue from activated carbon in prod. of veterinary pharm. from arsenic compds.	1
K103	Process residues from aniline extraction from the prod. of aniline	100
K104	Combined wastewater streams generated from prod. of nitrobenzene/aniline	10
K105	Aqueous stream from washing in prod. of chlorobenzenes	10
K106	Wastewater treatment sludge from mercury cell process in chlorine prod.	1
K107	Column bottoms from separation in prod. of UDMH from carboxylic acid hydrazides	10
K108	Condensed column overheads and vent gas from prod. of UDMH from -COOH hydrazides	10
K109	Spent filter catridges from purif. of UDMH prod. from carboxylic acid hydrazides	10
K110	Condensed column overheads from prod. of UDMH from carboxylic acid hydrazides	10
K111	Product washwaters from prod. of dinitrotoluene via nitration of benzene	10
K112	Reaction by-product water from drying of toluenediamine during its prod.	10
K113	Condensed liquid light ends from purification of toluenediamine during its prod.	10
K114	Vicinals from purification of toluenediamine during its prod.	10
K115	Heavy ends from purification of toluenediamine during its prod.	10
K116	Organic condensate solvent recovery system in prod. of toluene diisocyanate	10

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RCRA Code	Description	RQ (lbs)
K117	Wastewater from vent gas scrubber in prod. of ethylene bromide prod. from ethene	1
K118	Spent absorbent solids in purification of ethylene dibromide manuf. from ethene	1
K123	Process wastewater from the prod. of ethylenebisdithiocarbamic acid and salts	10
K124	Reactor vent scrubber water from prod of ethylenebisdithiocarbamic acid and salts	10
K125	Solids formed in the prod. of ethylenebisdithiocarbamic acid and salts	10
K126	Dust/sweepings from the prod. of ethylenebisdithiocarbamic acid and salts	10
K131	Wastewater and spent sulfuric acid from the prod. of methyl bromide	100
K132	Spent absorbent and waste water from the prod. of methyl bromide	1000
K136	Still bottoms from purification of ethylene dibromide manuf. from ethene	1
D001	Unlisted hazardous wastes characteristic of ignitability	100
D002	Unlisted hazardous wastes characteristic of corrosivity	100
D003	Unlisted hazardous wastes characteristic of reactivity	100
	Unlisted hazardous wastes characteristic of toxicity:	
D004	Arsenic	1
D005	Barium	1000
D018	Benzene	10
D006	Cadmium	10
D019	Carbon tetrachloride	10
D020	Chlordane	1
D021	Chlorobenzene	100
D022	Chloroform	10
D007	Chromium	10
D023	o-Cresol	1000
D024	m-Cresol	1000
D026	Cresol	1000
D025	p-Cresol	1000
D016	2,4-D	100
D027	1,4-Dichlorobenzene	100
D028	1,2-Dichloroethane	100
D029	1,1-Dichloroethylene	100
D030	2,4-Dinitrotoluene	10
D012	Endrin	1
D031	Heptachlor (and epoxide)	1
D032	Hexachlorobenzene	10
D033	Hexachlorobutadiene	1
D034	Hexachloroethane	100
D008	Lead	1
D013	Lindane	1
D009	Mercury	1
D014	Methoxychlor	1
D035	Methyl ethyl ketone	5000
D036	Nitrobenzene	1000
D037	Pentachlorophenol	10
D038	Pyridine	1000
D010	Selenium	10
D011	Silver	1
D039	Tetrachloroethylene	100
D015	Toxaphene	1
D017	2,4,5-TP	100
D040	Trichloroethylene	100

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RCRA Code	Description	RQ (lbs)
D041	2,4,5-Trichlorophenol	10
D042	2,4,6-Trichlorophenol	10
D043	Vinyl chloride	100

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APPENDIX 3

LEPC CONTACTS

APPENDIX 3

LOCAL EMERGENCY PLANNING COMMITTEE CHAIRPERSONS

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APPENDIX 4

TYPE OF ASSISTANCE AVAILABLE FROM REGIONAL RESPONSE TEAM (RRT) AGENCIES

Appendix 4
Type of Assistance Available From Regional Response Team (RRT) Agencies

United States Coast Guard (USCG):

When the RRT is activated for an inland release, the USCG will provide technical expertise and resources available with the Service to the On Scene Coordinator (OSC) relative to environmental protection and mitigation during the period. The Coast Guard can offer expertise in the fields of domestic and international marine environmental protection, port safety and security, marine law enforcement, ship navigation and construction, and the manning, operation, and safety of vessels and marine facilities.

The Coast Guard maintains facilities, vessels, aircraft, and vehicles which can be used for command, control, and surveillance of pollution releases occurring in the coast areas. The USCG also maintains special forces and teams, including the National Strike Force (NSF), the OSC Emergency Task Force (ETG), and the Public Information Assist Team (PIAT).

The Coast Guard Environmental Health Officers are located at Coast Guard Headquarters and each District Office. The Environmental Health Officers, if available, can provide technical assistance to the OSC during an release response.

Environmental Protection Agency (EPA):

The EPA chairs the National Response Team (NRT) and Co-Chairs the RRT. The EPA provides predesignated OSCs for all releases in the inland zone and RPMs for all remedial actions. During a release specific activation of Region VIII's RRT, EPA chairs the RRT when activated for a release or potential release in the inland zone as specified. EPA will provide technical expertise and resources available within the Agency to the OSC relative to environmental protection and mitigation during periods of activation. This expertise shall address the environmental effects of oil discharges or releases of hazardous substances , pollutants, or contaminants, and environmental pollution control techniques.

Additionally , EPA can provide legal expertise on the interpretation of CERCLA and other environmental statutes. Available resources include, but are not limited to, EPIC overflights, Environmental Response Team (ERT), Environmental Emergency Response Unit (EERU), Technical Assistance Team (TAT), Emergency Response Cleanup Contractors (ERCS) and FIT. EPA may enter into a contract or cooperative agreement with the appropriate State in order to implement a response action.

Federal Emergency Management Agency (FEMA):

FEMA provides guidance and technical assistance for hazardous materials and other emergency preparedness and response activities that involve planning, training, exercising, and coordination. During an RRT response, FEMA provides assistance to the lead agency in coordinating temporary or permanent relocation of residents, businesses, or facilities. (Short term evacuation is the responsibility of local governments.) FEMA also provides secondary support, as needed, primarily in the area of communications. FEMA assists Federal and State agencies with planning and response activities regarding radiological hazards and catastrophic earthquake events. If a Presidential Disaster is declared, FEMA then assumes a considerably different role and experiences its authority under the Disaster Relief Act and coordinates all Federal assistance activities.

Department of Defense (DOD):

DOD provides representatives from the U.S. Army, U.S. Army Corps of Engineers (USACE), and U.S. Air Force. Resources and assistance available from these agencies are outlined below. The appropriate RRT member should be contacted for the desired support.

> The U.S. Army's various military facilities have vehicles, equipment, and in some cases aircraft, which can be made available in the event of critical spill or release incidents. In addition, heavy construction equipment may be locally available.
>
> USACE can provide expertise in all disciplines of engineering. The USACE can also provide assistance in the area of dredging, surveying, supply vessels, and manpower. The expertise can be used for clearing channels, locating obstructions, etc. Activation of the Corps resources in support of an RRT activity would be in the form of a written mission assignment and on a reimbursable basis. This mission assignment will outline the parameters of work to be done and estimated dollar authority to accomplish the prescribed mission.

The United States Army Corps of Engineers has specialized equipment and personnel for maintaining navigation channels, for removing navigation obstruction, for accomplishing structural repairs, and for performing maintenance to hydropower electric generating equipment. The Corps can also provide contract writing and contract administrative services for other Federal agencies.

The Missouri River Division of the USACE has specialized resources that can provide any USACE Response Team with Hazard and Toxic Waste (HTW) support in areas of chemistry, industrial hygiene, geotechnical, environmental process treatment support, and legal and general environmental regulatory guidance during RRT responses. Missouri River Division has HTW contracts, management expertise, and can provide HTW contractor assistance in the field as requested by the Emergency Management Division during RRT response. It is not the responsibility of USACE to physically respond to HTW releases during RRT activation. USACE will provide technical assistance or contract management and support only.

Department of Energy (DOE):

DOE through the Radiological Assistance Program and Federal Radiological Monitoring Assessment Program can assess the magnitude and impact of a radiological release. They will provide assessments to states and cognizant federal agencies.

Department of Agriculture (USDA):

DOA provides expertise in managing agriculture, forest, and wilderness areas and in selecting landfill disposal sites. The USDA Soil Conservation Service can be helpful in predicting effects of pollutants on soil and their movements over and through soil. The U.S. Forest Service has the capability and equipment to make temporary roads for access to remote areas. Additionally, the USFS has the resources to logistically support long-term temporary messing and lodging of personnel in remote areas.

Department of Commerce (DOC):

DOC through NWS can provide a wide range of services depending on the location and type of release. The National Weather Service (NWS) forecast offices are a 24-hour source of real time and some climatic weather, hydrologic, and forecasts for land. In addition to environmental support, the NWS operates a network of 370 continuous broadcast radio stations that can be used to communicate life or property threatening information directly to the general public and media. It also supports a satellite-based hard copy service that links the NWS to the media, press wire services, State, and local emergency/civil defense managers. The National Oceanic and Atmospheric Administration (NOAA) maintains the Computer-Aided Management of Emergency Operations (CAMEO) programs and contingency plans for first responders.

National Environmental Satellite, Data and Information Services (ESDIS). Climatological data on weather conditions, past and present, and hydrological histories are available through ESDIS's National Climatic Center in Asheville, NC; the National Oceanographic Data Center in Washington, DC has related information effecting inland weather. Trained personnel are available in these organizations to meet specific analytical requirements of the OSC in a variety of environmental areas.

Department of Health and Human Services (DHHS) :

DHHS can provide consultation concerning the effects on the public health of the population that may be affected via a hazardous substance release. U.S. Public Health Service (PHS) physicians, nurses, public health advisors, and other types of personnel may be activated to assist in major releases. The Centers for Disease Control, Atlanta, Georgia, can be accessed to provide emergency response consultation, epidemiology, toxicological experts, and health studies when needed. The U.S. Public Health Service (PHS) Agency for Toxic Substances and Disease Registry (ATSDR) has the following national 24-hour emergency response telephone number for advice and guidance concerning public health: FTS 404-639-0615. Ideally, this number should be used by any Federal, State, local, or private official to augment Regional capabilities.

Pursuant to CERCLA (SARA) and Executive Order 12580, ATSDR has responsibility for conducting health activities relating to the release of hazardous substances. The EPA OSC may request ATSDR assistance by contacting the Region's ATSDR representative at any time during a removal action if the release appears to present an imminent and substantial danger to the public health or welfare. ATSDR may perform on-site health assessments to determine the potential nature and magnitude of any imminent health threat and may issue health advice. The OSC should attach such findings as an appendix to the appropriate Action Memorandum. ATSDR also may provide assistance on worker health and safety issues through an ATSDR Interagency Agreement with the Occupational Safety and Health Administration (OSHA) and/or the National Institute of Occupational Safety and Health (NIOSH).

Most ATSDR site-specific and all general program activities are funded through the regular Superfund budget process. Funds for these activities are transferred via an annual on-going responsibilities IAG. Only large-scale, long-term epidemiological site studies would require use of a site-specific IAG. The Memorandum of Understanding between ATSDR and EPA (May 28, 1985) further defines the role of ATSDR and specific financial procedures.

The Colorado Department of Health (CDH) has entered into a cooperative agreement with ATSDR Emergency Response, Atlanta. A project officer will be assisting the CDH with the further development of emergency response capabilities, especially in becoming more involved; available regarding health advice and recommendations in emergency situations.

Department of the Interior (DOI):

The Department of the Interior (DOI) can provide information about the lands and resources specifically under DOI jurisdiction as well as offer technical expertise related to geology, hydrology, minerals, fish and wildlife, cultural resources, and recreation resources. The Regional Environmental Officer, Office of Environmental Affairs, represents the DOI on the RRT and is responsible for coordinating RRT/DOI activities.

DOI has direction jurisdiction for the protection of resources on its own lands as well as trustee responsibilities for selected natural resources regardless of location. The DOI natural resource trusteeship that extends beyond DOI site boundaries includes migratory birds, anadromous fish and endangered and threatened species and their critical habitats; federally owned minerals; and certain federally-managed water resources.

Within the Department, individual bureaus have specific responsibilities and capabilities as follows:

> Bureaus will provide assistance in investigations to evaluate the magnitude and severity of discharges on or affecting facilities or resources under their jurisdiction, and may conduct activities as natural resource trustees as set forth in subpart G of the NCP.
>
> Bureaus will provide advice to the OSC when response operations are being performed that affect lands, facilities, or natural resources under their management authority.
>
> Bureaus may provide technical assistance in disposal activities. However, lands under the jurisdiction of the Department of the Interior (including certain municipal landfills) may not be utilized as disposal sites.
>
> Bureaus may provide assistance in air and ground transportation support and in maintaining communications support.

U.S. Fish and Wildlife Service (FWS):

Will provide advice on migratory birds, anadromous fish, and endangered and threatened species.

Will coordinate with the State RRT Representative in establishing bird collection, cleaning and recovery centers, and directing the actions of professional and volunteer groups who desire to assist in these activities.

May provide advice to State wildlife resource agencies upon request by the State RRT representative.

United States Geological Survey (USGS):

May provide expertise in geology and hydrology.

Bureau of Mines (BOM):

May provide analytical facilities which could aid in identifying inorganic hazardous substances and technical expertise in metals and metallurgy relevant to site cleanup.

May provide technical expertise during response operations involving hazardous substance releases from mining operations.

Office of Surface Mining (OSM):

May provide advice in releases involving surface coal mining: abandoned coal mined lands, coal outcrop fires, mine waste bank stability, and toxic mine drainage.

Bureau of Reclamation (BR):

Operation and maintenance of water projects in the West: engineering and hydrology and reservoirs.

Will provide information on current and predicted channel flow volumes, where water courses are controlled by dams or other control structures under their management or control.

Will, to the extent possible, alter the channel flow volumes of water courses from control structures under their management authority to reduce the negative environmental effects of a pollution release or assist in spill response operations.

Bureau of Indian Affairs (BIA):

May assist in coordination of activities affecting Indian lands and in identifying Indian Tribal government officials.

Will assist in obtaining access to Indian land areas as needed for response action.

Will coordinate with the Incident Public Information Office Director to ensure that pertinent information is made available to Tribal authorities on a timely basis.

National Park Service (NPS):

Will provide advice on response affecting National Park System lands (National Parks, National Recreation Areas, National Historic Sites, National Trails), historic and cultural resources, and wild and scenic rivers.

Department of Labor (DOL):

DOL through the Occupational Safety and Health Administration (OSHA) will provide the OSC with advice, guidance, and assistance regarding hazards to persons involved in removal or control of oil or chemical spills, and in the precautions necessary to prevent endangerment of their health and safety. OSHA and states having OSHA approved plans have responsibility for employee health and safety at response activities and will provide site inspections upon request. The OSHA Final Rule "Hazardous Waste Operations and Emergency Response" (Federal Register, March 6, 1989, Page 9294) is presently used to regulate employee health and safety during emergency response and at hazardous waste operations.

Department of Transportation (DOT):

Federal Highway Administration (FHWA):

The FHWA's Office of Motor Carriers (OMC) serves as the regional representative for RSPA. The OMC can provide expertise pertaining to the highway transportation of hazardous materials and hazardous substances, and through RSPA offers expertise in the requirements for packaging, handling, and transporting regulated hazardous materials by all modes of transportation.

Nuclear Regulatory Commission (NRC):

In accordance with the NRC Incident Response Plan (NUREG-0728) NRC will respond, as appropriate, to releases of radioactive materials by its licensees, to monitor the actions of those licensees and assure that the public health and environment are protected and adequate recovery operations are instituted. The Nuclear Regulatory Commission will keep EPA informed of any significant actual or potential releases in accordance with procedural agreements. In addition, the NRC will provide advice to the OSC/RPM when assistance is required in identifying the source and character of other hazardous substance releases where the Commission has licensing authority for activities utilizing radioactive materials.

Department of Justice (DOJ):

DOJ can provide legal advice to deal with judicial questions arising from discharges, releases, and Federal agency responses.

Department of State (DOS):

DOS will lead in developing joint international contingency plans. It will also help to coordinate an international response when a pollution discharge or release crosses international boundaries or involves foreign flag vessels. Additionally, this department will coordinate requests for assistance from foreign governments and U.S. proposals for conducting research at releases that occur in waters of other countries.

NOTE: Additional duties: USCG, ATSDR, and FEMA have special responsibilities at non-Federal facilities. EPA has negotiated MOUs with these Federal agencies which sets forth the role each agency will play in CERCLA financed response operations and outlines the administrative procedures for participation and compensation of these agencies. OSCs shall implement the administrative procedures of the MOUs when necessary.

APPENDIX 5

INITIAL HAZARDOUS SUBSTANCE RELEASE REPORT FORM

The initial report form has been set up as a WordPerfect 5.1 form for use on PCs. It has been formatted for a HP Laser Jet printer, LR Margins 0.8, 0.3, TB Margins 0.5, 0.5, and Courier 12 cpi font. To correctly use the form you need to make sure that you are entering data using the typeover mode of WordPerfect to fill in the blanks. If additional space is needed for any one item, it can be added by switching back to the insert mode of WordPerfect. This form has been provided to each District HMM Coordinator on disk.

HAZARDOUS SUBSTANCE RELEASE
INITIAL REPORT

GENERAL

BLM SITE NUMBER ________ NRC REPORT NUMBER ________ SITE NAME ________

REPORTED BY ________ DATE & TIME REPORTED OR DISCOVERED ________

LOCATION

T ______ R ______ S ______ DIRECTIONS TO SITE (IDENTIFY TOWNS, HIGHWAYS, COUNTY)

____

____

ENVIRONMENTAL FACTORS

WATER AFFECTED OR THREATENED: Y [ ] N [ ] IF Y NAME OF WATER ________

SIGNIFICANT WILDLIFE HABITAT AFFECTED OR THREATENED: Y [ ] N [ ] IF Y DESCRIBE ______

____

OCCURRED/THREATENED:DEATH:Y [ ] N [ ] INJURY:Y [ ] N [ ] PROPTY DAMAGE:Y [ ] N [ ]

ANY Y DESCRIBE ________

____

MATERIAL DATA

KNOWN Y [ ] N [ ] DESCRIBE ________

____

QUANTITY RELEASED ________

CAUSE OF RELEASE ________

PRP DATA

PRP KNOWN [ ] UNKNOWN [ ] SUSPECTED [ ] IF KNOWN OR SUSPECTED IDENTIFY (NAME, ADDRESS, PHONE) ________

ACTION DATA

NOTIFICATIONS MADE (BE SPECIFIC, NAME, DATE, TIME) ________

____

____

AGENCIES ON SCENE (BE SPECIFIC, IDENTIFY OSC) ________

____

____

ACTIONS BEING TAKEN ________

____

____

____

SITE SECURED Y [ ] N [ ]

REPORT PREPARED BY: ________ DATE: ________

____
SIGNATURE

APPENDIX 6

ENVIRONMENTAL HOTLINE TELEPHONE NUMBERS

Appendix 6
ENVIRONMENTAL HOTLINES

BUREAU OF EXPLOSIVES HOTLINE 202/639-2222 Washington, DC area
This hotline run by the Association of American Railroads is a 24-hour emergency number which can be used for assistance in hazardous materials releases involving railroads and often contacted through CHEMTREC (see below).

CHEMTREC HOTLINE 800/424-9300

The 24-hour Chemical Transportation Emergency Center will identify unknown chemicals, advise on response methods and procedures for chemicals and situations, and provide help in contacting shippers/carriers/manufacturers/product response teams.

D.O.T. HOTLINE 202/366-4488

This Department of Transportation hotline provides informational assistance pertaining to Federal regulations for transportation of hazardous materials, CFR-49.

NATIONAL PESTICIDE TELECOMMUNICATIONS NETWORK 800/858-7378

This network provides impartial information on pesticide products, basic safety practices, health and environmental effects, and cleanup and disposal procedures.

NATIONAL CAPITAL POISON CONTROL CENTER 202/625-3333 (Collect calls accepted)

This hotline operated by Georgetown University Hospital in Washington, DC, provides information on accidental ingestion of chemicals, poisons, or drugs.

RCRA/SUPERFUND HOTLINE 800/424-9346

An EPA hotline that answers questions concerning the Resource Conservation and Recovery Act, Superfund, and hazardous waste regulations. Requests for certain documents from the Federal Register and public laws are also handled in addition to referral to appropriate contacts.

TSCA HOTLINE 202/554-1404 Washington, DC

The Toxic Assistance Office at EPA will answer questions and offer general and technical assistance on the Toxic Substances Control Act. Staff will help you to obtain guidance on TSCA regulations including guidance on PCBs and asbestos issues.

STATE OF UTAH POISON CONTROL CENTER 800-456-7707

Provides information on accidental ingestion of chemicals, poisons, or drugs.

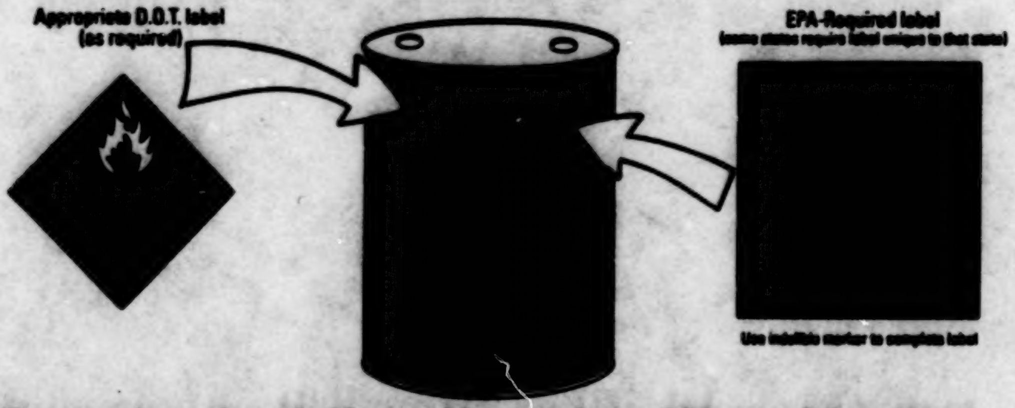
APPENDIX 7

WASTE MANIFEST EXAMPLE

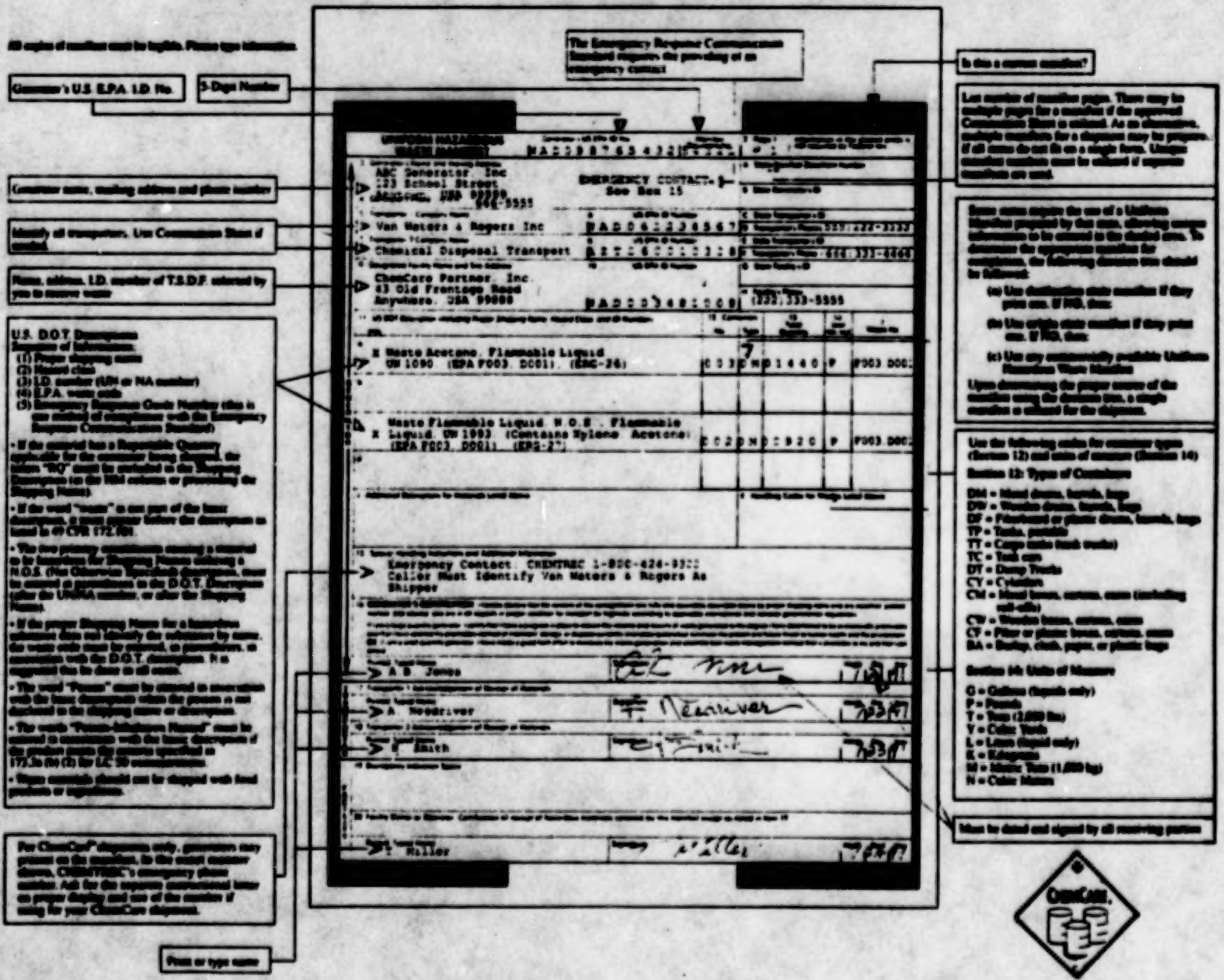
Preparation of Hazardous Waste for Shipment

Labeling Hazardous Waste

Minimum Requirements of U.S. E.P.A. and D.O.T.


Appropriate D.O.T. label
(as required)
EPA-Required label
(some states require label unique to that state)
Use indelible marker to complete label

Preparing the Uniform Hazardous Waste Manifest



All copies of manifest must be legible. Please type information.

Generator's U.S. E.P.A. I.D. No.

5-Digit Number

The Emergency Response Communication Standard requires the providing of an emergency contact

Is this a current manifest?

List number of manifest pages. There may be multiple pages for a manifest if the approved Continuation Sheet is utilized. As an alternative, multiple manifests for a shipment may be prepared if all items do not fit on a single form. Unique manifest numbers must be utilized if separate manifests are used.

Generator name, mailing address and phone number

Identify all transporters. Use Continuation Sheet if needed.

Name, address, I.D. number of T.S.D.F. selected by you to receive waste

U.S. D.O.T. Description
Sequence of Information:
(1) Proper shipping name
(2) Hazard class
(3) I.D. number (UN or NA number)
(4) E.P.A. waste code
(5) Emergency Response Guide Number (this is one method of compliance with the Emergency Response Communication Standard)

- If the material has a Reportable Quantity applicable for the container being shipped, the letters "RQ" must be included in the Shipping Description (in the HM column or preceding the Shipping Name).
- If the word "waste" is not part of the basic description, it must appear before the description as listed in 49 CFR 172.101.
- The two primary constituents causing a material to be hazardous for Shipping Names utilizing a N.O.S. (Not Otherwise Specified) description, must be entered in parentheses in the D.O.T. Description (after the UN/NA number, or after the Shipping Name).
- If the proper Shipping Name for a hazardous substance does not identify the substance by name, the waste code must be entered, in parentheses, in association with the D.O.T. description. It is suggested this be done in all cases.
- The word "Poison" must be entered in association with the basic description when the poison is not disclosed in the shipping name or description.
- The words "Poison-Inhalation Hazard" must be entered in association with the basic description if the product meets the criteria specified in 173.3a (b) (2) for LC 50 concentrations.
- These materials should not be shipped with food products or foodstuffs.

For ChemCare® shipments only, generators may present on the manifest, in the exact manner shown, CHEMTREC's emergency phone number. Ask for the separate instructional letter on proper display and use of this number if using for your ChemCare shipment.

Print or type name

Some states require the use of a Uniform Manifest prepared by that state, allowing certain information to be entered in the shaded area. To determine the appropriate manifest for compliance, the following decision tree should be followed:

(a) Use destination state manifest if they print one. If NO, then:

(b) Use origin state manifest if they print one. If NO, then:

(c) Use any commercially available Uniform Hazardous Waste Manifest.

Upon determining the proper source of the manifest using the decision tree, a single manifest is utilized for the shipment.

Use the following codes for container types (Section 12) and units of measure (Section 14)

Section 12: Types of Containers

DM = Metal drums, barrels, kegs
DW = Wooden drums, barrels, kegs
DF = Fiberboard or plastic drums, barrels, kegs
TP = Tanks, portable
TT = Cargo tanks (tank trucks)
TC = Tank cars
DT = Dump Truck
CY = Cylinders
CM = Metal boxes, cartons, cases (including roll-offs)
CW = Wooden boxes, cartons, cases
CF = Fiber or plastic boxes, cartons, cases
BA = Burlap, cloth, paper, or plastic bags

Section 14: Units of Measure

G = Gallons (liquids only)
P = Pounds
T = Tons (2,000 lbs)
Y = Cubic Yards
L = Liters (liquid only)
K = Kilograms
M = Metric Tons (1,000 kg)
N = Cubic Meters

Must be dated and signed by all receiving parties

UNIFORM HAZARDOUS WASTE MANIFEST

ABC Generator Inc
123 School Street
Anytown, USA 99999
555-5555

EMERGENCY CONTACT - See Box 15

Van Waters & Rogers Inc PAD061234567

Chemical Disposal Transport

ChemCare Partner, Inc
43 Old Frontage Road
Anywhere, USA 99888
(222) 333-5555

X Waste Acetone, Flammable Liquid UN 1090 (EPA F003, D001), (ERG-26) 003 DM 01440 P F003 D001

X Waste Flammable Liquid N.O.S., Flammable Liquid, UN 1993 (Contains Xylene, Acetone) (EPA F003, D001) (ERG-27) 002 DM 00920 P F003 D001

Emergency Contact: CHEMTREC 1-800-424-9300
Caller Must Identify Van Waters & Rogers As Shipper

A B Jones

A. Roadriver

E Smith

E Miller

Please print or type
Form designed for use on elite (12 pitch) typewriter
Form Approved OMB No. 2050-0039 Expires [illegible]

"Public reporting burden for this [illegible] the form. [illegible] SW., Washington DC 20460 and to [illegible]

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
4. Generator's Phone (   )
A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name
6. US EPA ID Number
C. State Transporter's ID
D. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
10. US EPA ID Number
G. State Facility's ID
H. Facility's Phone

GENERATOR

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | *Month Day Year*

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | *Month Day Year*

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | *Month Day Year*

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | *Month Day Year*

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete. Lab Safety Supply, Inc

ORIGINAL-RETURN TO GENERATOR

(… typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.

23. Generator's Name	L. [illegible]
	M. State Generator's ID
24. Transporter ____ Company Name / 25. US EPA ID Number	N. State Transporter's ID
	O. Transporter's Phone
26. Transporter ____ Company Name / 27. US EPA ID Number	P. State Transporter's ID
	Q. Transporter's Phone

28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	29. Containers No.	29. Containers Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.					
b.					
c.					
d.					
e.					
f.					
g.					
h.					
i.					

S. [illegible] …ptions for Materials Listed Above	T. [illegible] …ling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

TRANSPORTER

33. Transporter ____ Acknowledgement of Receipt of Materials		Date
Printed/Typed Name	Signature	Month Day Year
34. Transporter ____ Acknowledgement of Receipt of Materials		Date
Printed/Typed Name	Signature	Month Day Year

FACILITY

35. Discrepancy Indication Space

EPA Form 8700-22A (Rev. 9-88) Previous editions are obsolete.

Reorder No. 880 Lab Safety Supply, Inc.

ORIGINAL-RETURN TO GENERATOR

Estimated burden: Public reporting burden for this collection of information is estimated to be 3.5 hours, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460; and to the Paperwork Reduction Project (2050-0028), Office of Management and Budget, Washington, D.C. 20503.

IV. Line-by-Line Instructions for Completing EPA Form 8700-12

Type or print in black ink all items except Item X, "Signature," leaving a blank box between words. The boxes are spaced at 1/4" intervals which accommodate elite type (12 characters per inch). When typing, hit the space bar twice between characters. If you print, place each character in a box. Abbreviate if necessary to stay within the number of boxes allowed for each Item. If you must use additional sheets, indicate clearly the number of the Item on the form to which the information on the separate sheet applies.

(NOTE: When submitting a subsequent notification form, notifiers must complete in their entirety Items I, II, III, VI, VII, VIII and X. Other sections that are being added to (i.e., newly regulated activities) or altered (i.e., installation contact) must also be completed. All other sections may be left blank.)

Item I — Installation's EPA ID Number:

Place an "X" in the appropriate box to indicate whether this is your first or a subsequent notification *for this site*. If you have filed a previous notification, enter the EPA Identification Number assigned to this site in the boxes provided. Leave EPA ID Number blank if this is your first notification *for this site*.

Note: When the owner of a facility changes, the new owner must notify U.S. EPA of the change, even if the previous owner already received a U.S. EPA Identification Number. Because the U.S. EPA ID Number is "site-specific," the new owner will keep the existing ID number. If the facility moves to another location, the owner/operator must notify EPA of this change. In this instance a new U.S. EPA Identification Number will be assigned, since the facility has changed locations.

Items II and III — Name and Location of Installation:

Complete Items II and III. Please note that the address you give for Item III, "Location of Installation," must be a physical address, *not a post office box or route number*.

County Name and Code: Give the county code, if known. If you do not know the county code, enter the county name, from which EPA can automatically generate the county code. If the county name is unknown contact the local Post Office. To obtain a list of county codes, contact the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161 or at (703) 487-4650. The list of codes is contained in the Federal Information Processing Standards Publication (FIPS PUB) number 6-3.

Item IV — Installation Mailing Address:

Please enter the Installation Mailing Address. If the Mailing Address and the Location of Installation (Item III) are the same, you can print "Same" in box for Item IV.

Item V — Installation Contact:

Enter the name, title, and business telephone number of the person who should be contacted regarding information submitted on this form.

Item VI — Installation Contact Address:

A) Code: If the contact address is the same as the location of installation address listed in Item III or the installation mailing address listed in Item IV, place an "X" in the appropriate box to indicate where the contact may be reached. If the location of installation address, the installation mailing address, and the installation contact address are all the same, mark the "Location" box. If an "X" is entered in either the location or mailing box, Item VI. B. should be left blank.

B) Address: Enter the contact address only if the contact address is different from either the location of installation address (Item III) or the installation mailing address (Item IV), and Item VI. A. was left blank.

Item VII — Ownership:

A) **Name:** Enter the name of the legal owner(s) of the installation, including the property owner. Also enter the address and phone number where this individual can be reached. Use the comment section in XI or additional sheets if necessary to list more than one owner.

B) **Land Type:** Using the codes listed below, indicate in VII. B. the code which best describes the current legal status of the land on which the facility is located:

F = Federal
S = State
I = Indian
P = Private
C = County
M = Municipal*
D = District
O = Other

**Note:* If the Land Type is best described as Indian, County or District, please use those codes. Otherwise, use Municipal.*

C) **Owner Type:** Using the codes listed below, indicate in VII. C. the code which best describes the legal status of the current owner of the facility:

F = Federal
S = State
I = Indian
P = Private
C = County
M = Municipal*
D = District
O = Other

**Note:* If the Owner Type is best described as Indian, County or District, please use those codes. Otherwise, use Municipal.*

D) **Change of Owner Indicator:** *(If this is your installation's first notification, leave Item VII. D. blank and skip to Item VIII. If this is a subsequent notification, complete Item VII. D. as directed below.)*

If the owner of this facility has changed since the facility's original notification, place an "X" in the box marked "Yes" and enter the date the owner changed.

If the owner of this facility has not changed since the facility's original notification, place an "X" in the box marked "No" and skip to Item VIII.

If an additional owner(s) has been added or replaced since the facility's original notification, place an "X" in the box marked "Yes". Use the comment section in XI to list any additional owners, the dates they became owners, and which owner(s) (if any) they replaced. If necessary attach a separate sheet of paper.

Item VIII — Type of Regulated Waste Activity:

A) **Hazardous Waste Activity:** Mark an "X" in the appropriate box(es) to show which hazardous waste activities are going on at this installation.

1) **Generator:** If you generate a hazardous waste that is identified by characteristic or listed in 40 CFR Part 261, mark an "X" in the appropriate box for the quantity of non-acutely hazardous waste that is generated per calendar month. If you generate acutely hazardous waste please refer to 40 CFR Part 262 for further information.

2) **Transporter:** If you transport hazardous waste, indicate if it is your own waste, for commercial purposes, or mark both boxes if both classifications apply. Mark an "X" in each appropriate box to indicate the method(s) of transportation you use. Transporters do not have to complete Item IX of this form, but must sign the certification in Item X. The Federal regulations for hazardous waste transporters are found in 40 CFR Part 263.

3) **Treater/Storer/Disposer:** If you treat, store or dispose of regulated hazardous waste, then mark an "X" in this box. You are reminded to contact the appropriate addresses listed for your State in Section III. C. of this package to request Part A of the RCRA Permit Application. The Federal regulations for hazardous waste facility owners/ operators are found in 40 CFR Parts 264 and 265.

4) **Hazardous Waste Fuel:** If you market hazardous waste fuel, place an "X" in the appropriate box(es). If you burn hazardous waste fuel on-site, place an "X" in the appropriate box and indicate the type(s) of combustion devices in which hazardous waste fuel is burned. (Refer to definition section for complete description of each device).

Note: Generators are required to notify for waste-as-fuel activities only if they market directly to the burner.

"Other Marketer" is defined as any person, other than a generator marketing hazardous waste, who markets hazardous waste fuel.

5) **Underground Injection Control:** If you generate and/or treat, store or dispose of hazardous waste, place an "X" in the box if an injection well is located at your installation. "Underground Injection" means the subsurface emplacement of fluids through a bored, drilled or driven well: or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

B) Used Oil Fuel Activities

Mark an "X" in the appropriate box(es) to indicate which used oil fuel activities are taking place at this installation.

1) **Off-Specification Used Oil Fuel:** If you market off-specification used oil, place an "X" in the appropriate box(es). If you burn used oil fuel place an "X" in the box(es) below to indicate type(s) of combustion devices in which off-specification used oil fuel is burned. (Refer to definition section for complete description of each device).

Note: Used oil generators are required to notify only if marketing directly to the burner.

"Other Marketer" is defined as any person, other than a generator marketing his or her used oil, who markets used oil fuel.

2) **Specification Used Oil Fuel:** If you are the first to claim that the used oil meets the specification established in 40 CFR 266.40(e) and is exempt from further regulation, you must mark an "X" in this box.

Item IX — Description of Regulated Wastes:
(Only persons involved in hazardous waste activity (Item VIII A.) need to complete this item. Transporters requesting a U.S. EPA Identification Number do not need to complete this item, but must sign the "Certification" in Item X.)

You will need to refer to 40 CFR Part 261 (enclosed as Section VII) in order to complete this section. Part 261 identifies those wastes that EPA defines as hazardous. If you need help completing this section, please contact the appropriate addressee for your State as listed in Section III. C. of this package.

A) Characteristics of Nonlisted Hazardous Wastes: If you handle hazardous wastes which are not listed in 40 CFR Part 261, Subpart D but do exhibit a characteristic of hazardous waste as defined in 40 CFR Part 261, Subpart C, you should describe these wastes by the EPA hazardous waste number for the characteristic. Place an "X" in the box next to the characteristic of the wastes that you handle. If you mark "4. Toxicity Characteristic," please list the specific EPA hazardous waste number for the specific contaminant(s) in the box(es) provided. Refer to Section VIII to determine the appropriate hazardous waste number.

B) Listed Hazardous Wastes: If you handle hazardous wastes that are listed in 40 CFR Part 261, Subpart D, enter the appropriate 4-digit numbers in the boxes provided.

***Note** - If you handle more than 12 listed hazardous wastes, please continue listing the waste codes on the extra sheet provided at the end of this booklet. If it is used, attach the additional page to the rest of the form before mailing it to the appropriate EPA Regional or State Office.*

C) Other Wastes: If you handle other wastes or State regulated wastes that have a waste code, enter the appropriate code number in the boxes provided.

Item X — Certification:
This certification must be signed by the owner, operator, or an authorized representative of your installation. An "authorized representative" is a person responsible for the overall operation of the facility (i.e., a plant manger or superintendent, or a person of equal responsibility). *All notifications must include this certification to be complete.*

Item XI — Comments:
Use this space for any additional comments.

V. Definitions

The following definitions are included to help you to understand and complete the Notification Form:

ACT or RCRA means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Section 6901 *et seq.*

Authorized Representative means the person responsible for the overall operation of the facility or an operational unit (i.e., part of a facility), e.g., superintendent or plant manager, or person of equivalent responsibility.

Boiler means an enclosed device using controlled flame combustion and having the following characteristics:

(1) the unit has physical provisions for recovering and exporting energy in the form of steam, heated fluids, or heated gases;

(2) the unit's combustion chamber and primary energy recovery section(s) are of integral design (i.e., they are physically formed into one manufactured or assembled unit);

(3) the unit continuously maintains an energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel;

(4) the unit exports and utilizes at least 75 percent of the recovered energy, calculated on an annual basis (excluding recovered heat used internally in the same unit, for example, to preheat fuel or combustion air or drive fans or feedwater pumps); and

(5) the unit is one which the Regional Administrator has determined on a case-by-case basis, to be a boiler after considering the standards in 40 *CFR* 260.32.

Burner means the owner or operator of any boiler or industrial furnace that burns hazardous waste fuel for energy recovery and that is not regulated as a RCRA hazardous waste incinerator.

Disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Disposal Facility means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure.

EPA Identification (I.D.) Number means the number assigned by EPA to each generator, transporter, and treatment, storage, or disposal facility.

Facility means all contiguous land, structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

Generator means any person, by site, whose act or process produces hazardous waste identified or listed in 40 *CFR* Part 261.

Hazardous Waste means a hazardous waste as defined in 40 *CFR* 261.3.

Hazardous Waste Fuel means hazardous waste and any fuel that contains hazardous waste that is burned for energy recovery in a boiler or industrial furnace that is not subject to regulation as a RCRA hazardous waste incinerator. However, the following hazardous waste fuels are subject to regulation as used oil fuels:

(1) Used oil fuel burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Subpart C of 40 *CFR* Part 261; and

(2) Used oil fuel mixed with hazardous wastes generated by a small quantity generator subject to 40 *CFR* 261.5.

Industrial Boiler means a boiler located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes.

Industrial Furnace means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame combustion to accomplish recovery of materials or energy: cement kilns, lime kilns, aggregate kilns (including asphalt kilns), phosphate kilns, coke ovens, blast furnaces, smelting furnaces, refining furnaces, titanium dioxide chloride process oxidation reactors, methane reforming furnaces, pulping liquor recovery furnaces, combustion devices used in the recovery of sulfer values from spent sulfuric acid, and other devices as the Administrator may add to this list.

Marketer means a person who markets hazardous waste fuel or used oil fuel. However, the following marketers are not subject to waste-as-fuel requirements (including notification) under Subparts D and E of 40 *CFR* Part 266:

(1) Generators and initial transporters (i.e., transporters who receive hazardous waste or used oil directly from generators including initial transporters who operate transfer stations) who do not market directly to persons who burn the fuels; and

(2) Persons who market used oil fuel that meets the specification provided under 40 *CFR* 266.40(e) and who are not the first to claim the oil meets the specification.

Municipality means a city, village, town, borough, county, parish, district, association, Indian tribe or authorized Indian tribal organization, designated and approved management agency under Section 208 of the Clean Water Act, or any other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes.

Off-Specification Used Oil Fuel means used oil fuel that does not meet the specification provided under 40 *CFR* 266.40(e).

Operator means the person responsible for the overall operation of a facility.

Owner means a person who owns a facility or part of a facility, including landowner.

Specification Used Oil Fuel means used oil fuel that meets the specification provided under 40 *CFR* 266.40(e).

Storage means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

Transportation means the movement of hazardous waste by air, rail, highway, or water.

Transporter means a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

Treatment means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or composition of hazardous waste so as to render it nonhazardous.

Used Oil means any oil that has been refined from crude oil, used, and as a result of such use, is contaminated by physical or chemical impurities. Wastes that contain oils that have not been used (e.g., fuel oil storage tank bottom clean-out wastes) are not used oil unless they are mixed with used oil.

Used Oil Fuel means any used oil burned (or destined to be burned) for energy recovery including any fuel produced from used oil by processing, blending or other treatment, and that does not contain hazardous waste (other than that generated by a small quantity generator and exempt from regulation as hazardous waste under provisions of 40 *CFR* 261.5). Used oil fuel may itself exhibit a characteristic of hazardous waste and remain subject to regulation as used oil fuel provided it is not mixed with hazardous waste.

Utility Boiler means a boiler that is used to produce electricity, steam or heated or cooled air or other gases or fluids for sale.

Waste Fuel means hazardous waste fuel or off-specification used oil fuel.

APPENDIX 8

HAZARDOUS SUBSTANCE RELEASE SITE REPORT

The hazardous substance release report form has been set up as a WordPerfect 5.1 form for use on PCs. It has been formatted for a HP laser jet printer, TB margins 1", 1", LR margins 1", 1", and Courier 12 cpi font. To correctly use the form, you need to make sure that you are entering data in the top part of the form using the typeover mode of WordPerfect to fill in the blanks. For the rest of the form, use the regular insert mode of WordPerfect except for item 1 and 2 under action data, here you will need to use the typeover mode to insert the data in the blanks. If a heading does not apply, insert not applicable, do not delete a heading. This will insure that the headings are consistent throughout the State. This form has been provided to each District HMM Coordinator on disk.

HAZARDOUS SUBSTANCE RELEASE SITE REPORT

GENERAL

BLM SITE # ______________ NRC REPORT # ______________

CERCLIS # ______________ FEDERAL FACILITIES DOCKET # ______________________

SITE NAME ____________________________________

REPORTED BY (NAME, AGENCY, PHONE NUMBER) ______________________________________

DATE & TIME REPORTED OR DISCOVERED ______________________________

TYPE OF SITE (SPILL, DUMP, ABANDONED MINE, WELL, ETC.) ________________________

PHOTOS TAKEN Y [ ] N [ ] IF YES ATTACH A SET

LOCATION

T ______ R ______ S ______ COUNTY ______________ DISTRICT ____________________

RESOURCE AREA ______________ DIRECTIONS TO SITE (IDENTIFY TOWNS, HIGHWAYS)

____

____

____

PLOT AREA ON MAP (7 1/2' QUAD IF AVAILABLE) AND ATTACH TO REPORT

USE THE FOLLOWING HEADINGS AND COVER THE ITEMS IN ORDER, IF ITEM IS NOT APPLICABLE USE NA, IF DATA NOT AVAILABLE PLEASE STATE

MATERIAL DATA

1. THE SUBSTANCE WHICH WAS RELEASED (INCLUDE SPECIFIC NAMES AND CHEMICAL NAMES IF KNOWN).

2. THE NATURE OF THE MATERIAL, I.E., SOLID, LIQUID, COLOR, ODOR, OR APPEARANCE.

3. TYPE OR TYPES OF CONTAINERS, PROVIDE SIZE, SHAPE, NUMBER, WHETHER HORIZONTAL OR VERTICAL.

4. CONDITION OF CONTAINER (LEAKING/DAMAGED).

5. DATA ON CONTAINERS (COMPANY NAME, LABELS, WARNING SIGNS, SERIAL NUMBERS, ETC.).

6. QUANTITY OF MATERIAL(S) RELEASED OR OCCURRING ON THE AREA (DESCRIBE WHICH).

7. CAUSE OF THE RELEASE.

8. POSSIBLE HEALTH EFFECTS OF THE MATERIAL.

ENVIRONMENTAL FACTORS

1. LOCATION OF THE SITE IN RELATIONSHIP TO THE TERRAIN (ON HILL, IN VALLEY OR GULLY, FLAT, ALONG ROAD, NEXT TO OR IN A STREAM OR DRY WASH, ETC.)

2. NAME AND DESCRIPTION OF ANY WATERS AFFECTED OR THREATENED (IDENTIFY TYPE, USAGE, AND DISTANCE AWAY).

3. QUANTITY AND TYPE OF MATERIAL (IF MORE THAN ONE TYPE IDENTIFIED ABOVE) ENTERING ANY WATERS.

4. SITE OF SIGNIFICANT WILDLIFE HABITAT (DESCRIBE TYPE AND POTENTIAL EFFECTS)

5. OTHER TYPES OF POTENTIAL OR EXISTING RESOURCE DAMAGE (DEAD OR DAMAGED VEGETATION, DEAD ANIMALS, ETC.)

6. DESCRIBE ANY THREAT OR TYPE OF PUBLIC HEALTH AND SAFETY CONCERNS.

7. DESCRIBE DETAILS OF ANY DEATH, INJURY, OR PERSONAL PROPERTY DAMAGE WHICH OCCURRED OR IS THREATENED.

OWNERSHIP DATA

1. IDENTIFY ANY LAND-USE AUTHORIZATIONS ON THE AFFECTED AREA AND THE NAME, ADDRESS, PHONE NUMBER, AND STATUS (I.E., R-O-Ws, LEASES, MINING CLAIMS, PERMITS, LESSEE, CLAIMANT, ETC.).

PRP DATA

1. PRP KNOWN [ ] UNKNOWN [ ] SUSPECTED [ ] IF KNOWN OR SUSPECTED IDENTIFY (NAME, ADDRESS, PHONE).

2. DESCRIBE HOW THE PRP WAS IDENTIFIED.

ACTION DATA

1. SITE SECURED Y [ ] N [ ]

2. NOTIFICATIONS

District HMM Specialist DATE: ____________ TIME: ____________
National Response Center DATE: ____________ TIME: ____________
UTAH DEQ DATE: ____________ TIME: ____________
DOI REG. ENVIR. OFFICER DATE: ____________ TIME: ____________
LOCAL LEPC DATE: ____________ TIME: ____________
S.O. HMM DATE: ____________ TIME: ____________

Identify any other notifications made by name, agency, date, and time.

3. Identify the agencies on scene and or who participated in the cleanup. Provide names of people involved, addresses, and phone numbers.

4. Identify by name, address and phone number any contractors involved in sampling, analysis, cleanup, and/or transportation.

5. Provide a copy of the Uniform Hazardous Waste Manifest if any material was transported.

6. Provide a chronological narrative of the events which occurred. Use the

following headings: Notification, actions taken, future actions required, problems encountered, resource\environmental damage which occurred, and recommendations.

REPORT PREPARATION DATA

Provide the name and signature of the preparer and the date of the report.

APPENDIX 9

HAZARDOUS SUBSTANCE REMOVAL PRELIMINARY ASSESSMENT

The hazardous substance removal preliminary assessment report form has been set up as a WordPerfect 5.1 form for use on PCs. It has been formatted for a HP Laser Jet, TB margins 0.5", 0.5", LR margins 0.8", 0.3", and Courier 12 cpi font. To correctly use the form, you need to make sure that you are entering data in the top part of the form and under the approvals section using the typeover mode of WordPerfect to fill in the blanks. For the rest of the form, use the regular insert mode of WordPerfect, spacing as needed between the headings. If a heading does not apply, merely insert not applicable, do not delete the heading. This will insure that the headings are consistent throughout the State. This form has been provided to each District HMM Coordinator on disk.

HAZARDOUS SUBSTANCES
REMOVAL PRELIMINARY ASSESSMENT

GENERAL

BLM SITE # ______________ NRC REPORT # ______________ SITE NAME ________________________

LOCATION

T ______ R ______ S ______ QUARTER QUARTER ___________ MERIDIAN ________________

DISCUSSION

1. **Source & Nature of Release:** (Owner/operator, describe type of facility, type of release, source, and what form the hazardous substance takes.)

2. **Evaluate & Discuss Threat to Public Health:** (Describe material of concern, why there is concern, what the threat to the public is.)

3. **Magnitude of Threat:** (Describe the toxicity of material, how much total material, what the pathways to target population are, and how many people may be at risk.)

4. **Factors Related to Possible Removal:** (Has material commingled with soils, water, etc., can it be stabilized, removed or how can targets be kept away from the material. Describe any access problems or restrictions. Describe disposal options if material could be removed.)

5. **Is the Proper Response Being Undertaken?:** (Explain who, what, and how the response is being handled.)

6. **Sampling & Testing Results:** (Discuss results of field characterization and other sampling and testing. Attach copy of tests.)

7. **Consultations:** (Describe who has been consulted, i.e., State DEQ, Game & Fish, etc., and the results of those consultations. Be specific and identify by name as well as agency.)

DETERMINATIONS

1. **There is No Release:** (If so explain how this conclusion was reached.)

2. **Release is Not Hazardous Substance:** (Explain how this conclusion was reached.)

3. **The Amount, Quantity, or Concentration Does Not Warrant Response:** (Explain why.)

4. **An Appropriate Response is Being Taken:** (Discuss any follow-up which may be required.)

5. **BLM Removal Action is Warranted and Can Be Taken:** (Discuss the removals to be accomplished, the material to be removed, the reasons for each removal, and how the removal will be accomplished.)

6. **Elevation of Action to Remedial Evaluation is Needed:** (Explain why a removal cannot be accomplished and why the action needs to be elevated.)

7. **Currently Available Information Inadequate to Make a Decision:** (Explain why information is inadequate and the steps to be taken to obtain adequate data needed for a decision.)

APPROVALS

RECOMMENDED

______________________________ __________
DISTRICT HMM COORDINATOR DATE

APPROVED

______________________________ __________
DISTRICT MANAGER DATE

IF REJECTED OR MODIFIED STATE REASONS AND MODIFICATIONS

APPENDIX 10

HAZARDOUS WASTE SITE REPORT NOTIFICATION

EPA Notification of Hazardous Waste Site

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name ______________________________

Street ______________________________

City ______________ State ________ Zip Code ________

B Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site ______________________________

Street ______________________________

City ____________ County ____________ State ________ Zip Code ________

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) ______________________________

Phone ______________________________

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year) ______________ To (Year) ______________

E Waste Type: Choose the option you prefer to complete

Option I: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☐ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☐ Other (Specify)

____

____

____

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

____

____

____

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

Form Approved
OMB No. 2000-0138

EPA Form 8900-1

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space ve the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) ______

Total Facility Waste Amount

cubic feet ______

gallons ______

Total Facility Area

square feet ______

acres ______

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☐ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

J Signature and Title:

The person or authorized representative ch as plant managers, superintendents, tees or attorney(s) of persons required otify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name ______

Street ______

City ______ State ______ Zip Code ______

Signature ______ Date ______

☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

General Information

The primary purpose of this notification program is to locate hazardous waste sites which treated, stored, or disposed of hazardous waste in the past and at which hazardous waste is still present. The most important information you can provide to EPA is the existence of a hazardous waste site and its location. For purposes of describing the hazardous waste to be found at a site, the quantities of such waste and the type of activity at a site, EPA is not requiring that you painstakingly document the information submitted. This information may be based on your knowledge, belief, recollection or reasonably available records.

Who Must Notify

Section 103(c) of Superfund requires that, unless exempted, the following must notify EPA:

- Any person who presently owns or operates a site where there are facilities that store, treat, or dispose of hazardous wastes.
- Any person who, at the time of disposal, owned or operated a site where there are facilities that store, treat, or dispose of hazardous wastes.
- Any person who accepted hazardous wastes for transport and selected a site where there are facilities that store, treat, or dispose of hazardous wastes.

Persons required to notify include individuals and private, public, and government entities.

Who Need Not Notify

1 Section 3010 of the Resource Conservation and Recovery Act (RCRA) requires any person who generates or transports hazardous wastes or who owns or operates a facility that treats, stores, or disposes of hazardous wastes to notify EPA of such activities. For purposes of this notification any person who notified under Section 3010 for one or more treatment, storage, or disposal facilities does not have to notify EPA again of those specific facilities. However, notification is required for facilities not previously reported under Section 3010 that are on or contiguous to sites reported under Section 3010.

2 A person does not have to notify of facilities that have qualified for Interim Status under RCRA.

3 Facilities at which less than 55 gallons (or 7.4 cubic feet) of hazardous wastes have been disposed are not subject to this notification requirement.

4 Locations where hazardous waste accumulated only as a result of minor leakage or spillage that occurred in the course of normal operations are not considered hazardous waste sites for purposes of this notification unless such accumulation may pose significant risk to human health and the environment.

5 Municipal landfills, town dumps and other facilities that receive household wastes only, are not subject to notification. Municipal landfills that received hazardous wastes, especially wastes in segregated shipments from industrial services, would be expected to notify.

6 Facilities at which hazardous wastes had been treated or stored and from which all those hazardous wastes have been removed so as to eliminate any risk to human health and the environment are not subject to this notification requirement.

7. The application of pesticide products registered under the Federal Insecticide, Fungicide and Rodenticide Act and the handling and storage of such products by agricultural producers are not subject to this notification requirement. Sites at which pesticides have been disposed are subject to the notification requirement of Section 103(c). Farmers who have disposed of waste pesticide in a manner consistent with the disposal instruction on the pesticide label are not subject to this notification requirement.

8 Stoppage in transport of hazardous waste which is temporary, incidental to the transportation, or at the ordinary operating convenience of a common or contract carrier is not, for purposes of this notification, storage.

9 Certain facilities which handle hazardous wastes pursuant to RCRA are not subject to this notification requirement. They include:

- Product or raw material storage tanks and transportation vessels or vehicles which are presently in use are not considered hazardous waste storage facilities, even though hazardous waste may be generated in such units in the course of their use. This does not extend, however, to units which are no longer in use and in which hazardous waste remain.
- Short-term accumulation (90 days or less) of hazardous wastes by generators subject to RCRA regulations is not, for purposes of this notification, storage.
- Totally enclosed treatment facilities.
- Wastewater treatment tanks and neutralization tanks.

Wastes Subject To Notification

Wastes subject to notification under Superfund are listed or identified as hazardous in the regulations issued under Section 3001 of RCRA. You are not expected to sample wastes to determine if they are hazardous. Rather, you can use any knowledge you have of the wastes, including the materials or processes involved or the types of facilities that generate the wastes. You should notify about sites if you believe the wastes may be hazardous due to barrel labels, odors, health effects, or other indicators.

Polychlorinated biphenyls (PCBs) are not currently included within the RCRA Section 3001 regulations but are regulated under the Toxic Substances Control Act (TSCA). Consequently, notification of PCB treatment, storage, or disposal sites is not mandatory. However, in order to make this notification more comprehensive, EPA is requesting a voluntary notification of sites containing PCBs as part of this notification program.

Wastes Not Subject To Notification

The following wastes are not subject to notification under Section 103(c) of Superfund.

1. Solid wastes listed below not presently regulated as "hazardous waste" under RCRA.

- "Household waste", defined as any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels):
- Solid wastes generated by any of the following and returned to the soil as fertilizers:

—The growing and harvesting of agricultural crops.

—The raising of animals, including animal manure.

- Mining overburden returned to the mine site.

- Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from combustion of coal or other fossil fuels.

- Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

- Solid waste from extraction, beneficiation and processing of ores or minerals, including phosphate rock and overburden from the mining of uranium ore.

- Cement kiln dust waste.

2. Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

3. Petroleum, including crude oil or any fraction thereof which is not specifically listed under RCRA.

Penalties

A person convicted of knowingly failing to notify may be fined not more than $10,000 or imprisoned for not more than 1 year, or both. In addition, violators shall not be entitled to the protections of the liability provisions of Section 107 of Superfund. Information received under Section 103(c) will not be used against any person in any criminal case, except a prosecution for perjury or for giving a false statement.

What Information Should Be Filed

When filing a notification, you must indicate the site location, specify the amount and type of any hazardous wastes to be found there, and show any known, suspected, or likely releases of such wastes from the site. You can provide all this information by completing and mailing the enclosed EPA Form 8900-1, Notification of Hazardous Waste Site.

The 53 chemical companies who submitted extensive facility information in previous responses to a survey conducted by the House Interstate and Foreign Commerce Committee in 1979 ("Waste Disposal Site Survey Directory"—Committee Print 96-IFC 33 pulished October 1979), may choose to

- complete Form 8900-1, or

- submit to EPA the information provided to the House Committee, updating and supplementing it as necessary to provide the information requested in Form 8900-1.

How Many Forms Should Be Filed

You should provide one notification form per site, whether the site has one or more treatment, storage, or disposal facilities within its boundary (see facility and site definitions).

When to File

Envelopes must be postmarked no later than June 9, 1981.

Acknowledgement

EPA will send you a postcard acknowledging receipt of your notification.

Confidential Information

Industrial and commercial organizations may be concerned about public disclosure of information that they report. All information reported in a notification other than trade secrets can be disclosed to the public, according to the Freedom of Information Act and EPA Freedom of Information Regulations. Because notification information is very general, EPA believes that it is unlikely that information reported qualifies for protection from disclosure as trade secrets.

However, if you wish to claim confidentiality, print the word "confidential" on both sides of the Notification Form and any attachments. EPA encourages you to substantiate your claim at the time of notification by providing written answers to each of the questions listed below. Otherwise EPA may send notice promptly on receipt of notification requesting substantiation within 15 working days.

1. Which portions of the information do you claim are entitled to confidential treatment?

2. How long do you want this information treated confidentially?

3. What measures have you taken to guard against undesired disclosures of the information to others?

4. To what extent has the information been disclosed to others, and what precautions have you taken in connection with those disclosures?

5. Has EPA or any other Federal Agency made a pertinent confidentiality determination? (If so, include a copy of this determination or reference to it, if available).

6. Will disclosure of the information be likely to substantially harm your competitive position? If so, what would the harm be, and why should it be viewed as substantial? What is the relationship between disclosure and the harm?

Where to File

EPA Region Address	Area and Information Telephone Numbers	
US EPA Region 1 Sites Notification Boston, MA 02203	617-223-0080 617-223-0214	Massachusetts Maine, Rhode Island Connecticut, New Hampshire, Vermont
US EPA Region 2 Sites Notification New York, NY 10007	212-264-1573	New Jersey, New York, Virgin Islands, Puerto Rico
US EPA Region 3 Sites Notification Philadelphia, PA 19106	215-597-8751	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
EPA Region 4 s Notification nta, GA 30308	404-881-2234	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
US EPA Region 5 Sites Notification Chicago, ILL 60604	312-886-3800	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
US EPA Region 6 Sites Notification Dallas, TX 75270	214-767-4075	Arkansas, Louisiana, New Mexico Oklahoma, Texas
US EPA Region 7 Sites Notification Kansas City, MO 64106	816-374-6864	Iowa, Kansas, Missouri, Nebraska
US EPA Region 8 Sites Notification Denver, CO 80295	800-332-3321 800-525-3022	Colorado Montana, North Dakota, South Dakota, Utah, Wyoming
US EPA Region 9 Sites Notification San Francisco, CA 94105	415-556-1407	Arizona, California, Hawaii, Nevada, Guam, American Samoa, Commonwealth of the Northern Marianas
US EPA Region 10 Sites Notification Seattle, WA 98101	800-732-9319 800-426-9947	Washington Alaska, Idaho, Oregon

Definitions

[illegible] following definitions may [illegible]st you in completing the [illegible]ification form.

Act: the "Comprehensive Environmental Response, Compensation, and Liability Act of 1980" (Superfund).

Administrator: the Administrator of the United States Environmental Protection Agency.

Disposal: the discharge, deposit, injection, dumping spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Environment: (A) the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management [illegible]hority of the United States [illegible]r the Fishery Conserva-[illegible] and Management Act of 1976, and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

Facility: (A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle rolling stock, or aircraft, or (B) any site or area where a hazardous waste has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel (for purposes of this notification, (A) is most applicable).

Hazardous Waste: for purposes of this notification requirement means any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of RCRA (but not including any waste the regulation of which under RCRA has been suspended by Act of Congress).

Owner or Operator: (A) in the case of an onshore facility, any person owning or operating such facility, and (B) in the case of any abandoned facility, any person who owned, operated, or otherwise controlled activities at such facility immediately prior to such abandonment.

Person: an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States Government, State, municipality, commission, political subdivision of a State or any interstate body.

Release: any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing, into the environment.

Site: the location at which hazardous wastes were stored, treated, or disposed of by persons required to notify under Section 103(c). This includes all contiguous land, structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous wastes. A site may consist of several treatment, storage, or disposal facilities.

Storage: the holding of hazardous waste for a temporary period at the end of which the hazardous waste is treated, stored, or disposed elsewhere.

Transport or Transportation: the movement of a hazardous substance by any mode, including pipeline (as defined in the Pipeline Safety Act), and in the case of a hazardous substance which has been accepted for transportation by a common or contract carrier, the term "transport" or "transportation" shall include any stoppage in transit which is temporary, incidental to the transportation movement, and at the ordinary operating convenience of a common or contract carrier, and any such stoppage shall be considered as continuity of movement and not as the storage of a hazardous waste.

Treatment: any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous waste to neutralize such waste, or so as to recover energy or material resources from the waste, or to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, or storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

Waste Quantity: the actual or estimated size of the area affected (such as square feet or acres) and/or amount of waste (such as gallons or cubic feet) for the various treatment, storage or disposal facilities used at a site.

Waste Type: the type of hazardous substance that has been treated, stored, or disposed at a site.

EPA

Official Business
Penalty for Private Use
$300

Postage and
Fees Paid
Environmental
Protection
Agency
EPA 335

United States
Environmental Protection
Agency

Office of Hazardous
Emergency Response WH-548
Washington DC 20460

APPENDIX 11

SITE BACKGROUND RECORD FORMAT

SBR GUIDELINES

SBR WORKGROUP PRODUCT
HMM WORKSHOP 1991
Final Revision
April 3, 1992

SBR GUIDELINES
Data Requirements for SBR at PA level
Final Revision April 3, 1992

PREFACE

These data requirements are primarily based on the EPA document "Guidance for Performing Preliminary Assessments Under CERCLA" (EPA, Dec. 1991). Preparation of the SBR should be done using the PA guidance document as a reference tool for the data requirements. Some data elements have been added which are not in the EPA guidance, but are deemed necessary by BLM to build the administrative record for the site. The collection of this data will provide the needed information to prepare the PA according to EPA guidance and to calculate a PA score, using the PA scoresheets (EPA forms) found in the guidance manual cited above. Use the companion document SBR Worksheets to compile information and document all sources.

I. GENERAL SITE INFORMATION

1. Site name, District, Resource Area, and BLM Serial Numbers of site.

2. Latitude and longitude of the site.

3. Legal description (to the nearest ¼ ¼ ¼).

4. State and County.

5. Nearest town and County seat.

6. The FFID and CERCLIS numbers of the site (if available) [note: not all of BLM's sites will be on CERCLIS or have FFID numbers].

7. A complete set of USGS 7-1/2' topographic maps covering not only the site but also a 4-mile radius around the site. If surface water exists within 2 miles of the site, maps must cover 15 mile distance downstream from the site (the "in-water segment" as defined by EPA).

8. A compilation of recent and historic aerial photographs of the site and adjacent areas, covering the time period pre-dating the existence of the site to current date, if available).

9. Description of site access and a listing of the nearest major transportation access to the area (airports, interstate highways, etc.).

10. Copy of the Master Title Plat for the site and adjoining townships.

11. Copies of recorded title documents for the site. Should include all leases, easements, rights-of-way, mining claims, compliance and other inspection reports (BLM, State or other).

12. The name, address, and telephone number of current operators and leasees of the site.

13. Description of current and past site use, and users.

14. The names, addresses, and telephone numbers of the local county engineer, sheriff, hospital and public health service official.

15. Information on current and historic local industrial uses, development and proposed development. Include listing of Standard Industrial Codes for businesses of the area.

16. Site type (use choices from table 3-1 of PA). This is landfill, spill, dump, etc.

17. Compile a record of any documented release(s) of hazardous substances at or near the site. Include date, time, circumstances of release, hazardous materials released, amounts. Also, document any emergency actions taken at the time of release.

18. Compile any Federal, State or local governmental records of regulated activities at the site, adjacent properties or in the local area. Examples are: Federal or State RCRA permits, UST permits, Clean Water Act (CWA) or Clean Air Act (CAA) discharge permits, and reports under Sections 311, 312, and 313 of EPCRA.

19. Compile available information from the operator, state regulatory agencies or others concerning the types and quantities of waste at the site.

II. SOURCE AND WASTE CHARACTERISTICS

1. Waste Quantity (WQ): For each source, waste quantity may be evaluated by one or all of four different measures called "tiers": constituent quantity, wastestream quantity, source volume, and source area. (PA table 1a, pg. 5 of PA scoresheets).
    - a. Waste constituent quantity.
    - b. Wastestream quantity.
    - c. Source volume. (estimate cubic yards)
    - d. Source area. (determine or estimate in square feet)

2. Waste Types

3. Probable Substances of Concern.

III. CLIMATE

1. The mean monthly precipitation for each month of the year and the yearly total mean precipitation. If any of the climatic data specific to the site area is not available, use data from the nearest NOAA weather station in a similar geographic setting.

2. The mean monthly temperature for each month of the year.

IV. GROUNDWATER USE

1. A listing and map showing all drinking water wells and the estimated population utilizing the wells within a 4 mile radius of the site, by HRS target sectors, (i.e., 0 to 1/4 mi., 1/4 to 1/2 mi., 1/2 to 1 mi., 1 to 2 mi., 2 to 3 mi., and 3 to 4 mi.). Primary vs. secondary targets must be identified. Primary targets are those wells that you suspect have been exposed to a hazardous substance released from the site. In other words, a high likelihood exists that a hazardous substance has migrated to the well. If you do not suspect a release, then you don't have any primary targets. The population served by municipal wells is available from local authorities. House counts in the area of private wells (either by a "windshield examination" or from local government sources) gives an estimate of population served by private wells. Multiply the house count by the avg. number of individuals per household - data from local authorities or from census data. (Note: the location of each individual well is not so important as the area of individual well use, and the area served by municipal wells). The population numbers for municipal wells is available from local authorities. House counts in the area of private wells gives an estimate of population. (see worksheets for additional guidance).The exact population served by these water sources is not important; what is required is an accurate estimate which is used for scoring primary targets and secondary targets using population ranges in tables found in the PA Guidance.

2. The distance to the nearest drinking water well.

V. HYDROGEOLOGY

1. Information on local geology and soils (stratigraphy, structure, soil or regolith types and depth)

2. Information on all aquifers present within a 4 mile radius of the site. Karst aquifers are of particular interest.

3. Hydraulic conductivity information below and near the site.

4. Determine if any lands in the target area are within Wellhead Protection zones.

5. Determine the hydrologic soil group common to the site area. Include information on soil physical characteristics and soil permeability if it is available.

VI. SURFACE WATER

1. Provide a listing of and delineate on a map all of the streams, rivers, lakes, canals, drainage ditches and springs along the 15-mile downstream in-water segment.

2. Identify and delineate on a map all drainage areas in which the site is located and any drainage pathways into and out of the site (include canals and ditches).

3. Determine the flood frequency for the site (i.e. determine whether the site is within an annual, 10-year, 100-year, 500-year, or greater than 500-year floodplain).

4. Identify any measures to prevent inundation of the site during a flood or to contain runoff (i.e. run-on/run-off control structures).

5. Identify the surface water types along the flow route and determine the mean flow rates.

6. Determine the population served by drinking water drawn from any drinking water intakes in the surface water migration path along the 15 mile target distance.

7. Identify all fisheries, recreational areas, wetlands, and sensitive environments along the 15 mile target distance.

VII. SOIL EXPOSURE CHARACTERISTICS

1. Identify the resident population at the site and within 200 feet of the contaminated area. This population includes residents, school pupils and teachers or day care attenders or workers on site.

2. Identify any sensitive environments in the area of suspected contamination.

VIII. AIR

1. Determine the population within the following radii sectors:
   a. Nearest individual (ft.) [note: this is a separate requirement].

   b. 0 to 1/4 mile

   c. 1/4 to 1/2 mile

   d. 1/2 to 1 mile

   e. 1 to 2 miles

f. 2 to 3 miles

g. 3 to 4 miles

● Note: these populations include the number of people regularly in the area for extended periods of time (residents, students and workers) within the radii distances from the site.

2. Presence and type of sensitive environments within a 1/2 mile radius of site. (see table 5 in PA guidance, page A-31).

3. Acreage of wetlands within 1/2 mile radius of site (see table 9, PA guidance, pg. A-45).

SBR WORKSHEETS

SBR WORKGROUP PRODUCT
HMM WORKSHOP 1991
Final revision
April 3, 1992

Preface:

These SBR worksheets are to be used in conjunction with the SBR Guidelines, and EPA's Guidance for Conducting Preliminary Assessments. The SBR Guidelines are merely a listing of the information required for the SBR, without the spaces for entering the data, and are to be used (if desired) as an easy reference to the data requirements with a minimum of pages. The SBR Worksheets and Guidelines are patterned after the requirements for conducting a Preliminary Assessment, as outlined in the above EPA publication. Reference is made in these worksheets to tables in the PA guidance, which would be used in determining a PA score, after the PA is completed.

SBR WORKSHEETS

Revised4/03/92

I. GENERAL SITE INFORMATION:

Item 1. Site name, District, Resource Area, and BLM Serial Number(s)

Item 2. Latitude and longitude of the site

Item 3. Legal description (to the nearest ¼ ¼ ¼)

Item 4. State and county

Item 5. Nearest town and County seat

Item 6. The FFID and CERCLIS numbers of the site, if available (not all of our sites will be on CERCLIS or have FFID numbers).

Potential Sources: *District/RA Files,, USGS topographic maps, EROS Data Center, DSC - Remote Sensing*

Narrative:

Sources(s) used:

Item 7. A complete set of USGS 7-1/2' topographic maps covering not only the site but also a 4-mile radius around the site. If surface water is within 2 miles of the site, maps must cover the 15-mile distance downstream (defined by EPA as the "target distance").

Item 8. A compilation and collection of recent and historical aerial photographs of the site and adjacent areas.

Potential Sources: USGS, BLM State Office/District/RA Files, EROS Data Center, US Dept. of Agriculture Aerial Photo Center, DSC - Remote Sensing

Narrative:

Sources(s) used:

Item 9. Description of site access and a listing of the nearest major transportation access to the area (airports, interstate highways, etc.).

Potential Sources: Maps, site reconnaissance

Narrative:

Source(s) used:

Item 10. Copy of the Master Title Plat for the site and adjacent townships.

Potential Sources: District/RA Records

Narrative:

Source(s) used:

Item 11. Copies of recorded authorization documents for the site. Should include all leases, easements, rights-of-way, mining claims, compliance and other inspection reports (BLM, State or other).

Potential Sources: County courthouses, BLM State/District/RA area records

Narrative:

Source(s) used:

Item 12. **The name, address, and telephone number of current operators and lessees of the site.**

Potential Sources: District/RA, records, i.e., lands, grazing and minerals.

Narrative: ______________________________

Source(s) used: ______________________________

Item 13. **Description of current and past site use, and users.**

Potential Sources: BLM Files (will vary with past users); land users, local government officials.

Narrative: ______________________________

Source(s) used: ______________________________

Item 14. The names, addresses, and telephone numbers of the local county engineer, sheriff, hospital and public health service official.

Potential Sources: County Planner, public health office.

Narrative:

Source(s) used:

Item 15. Information on current and historic local industrial uses, development and proposed development. Include listing of Standard Industrial Codes for businesses of the area.

Potential Sources: State, county, local government officials. (i.e. county planners, zoning boards, industrial siting commissions, etc.).

Narrative:

Sources used:

Item 16. Site type. Describe site as to landfill, drum site, UST, etc.

Potential Sources: Use Table 3-1 from PA guidance.

Narrative:

Source used:

Item 17. Compile a record of any documented releases of hazardous substances at or near the site (if not actually on the site, explain proximity of release to the site under this review).

Potential Sources: State Department of Environmental Quality, Highway Department, local emergency response organizations, EPA - CERCLIS List.

Narrative:

Source used:

Item 18. Compile any Federal, state, or local government records of regulated activities at the site, adjacent properties or in the local area. Examples are Federal or State RCRA permits, UST permits, WCA or CAA discharge permits, and reports under Sections 311, 312, and 313 or EPCRA.

Potential Sources: EPA, State Department of Environmental Quality, local emergency response organizations.

Narrative (list record gathered):

Item 19. Compile any available information from the operator, state regulatory agencies, or other entity concerning the types and quantities of wastes at the site.

***Potential Sources:** Company and employee's records, BLM Records, local planning and zoning boards, State Department of Environmental Quality, EPA.*

Narrative:

Sources used:

II. SOURCE AND WASTE CHARACTERISTICS

Item 1. Waste Quantity (WQ): For each source, waste quantity may be evaluated by one or all of four different measures called "tiers": 1) constituent quantity, 2) wastestream quantity, 3) source volume, and 4) source area. (PA table 1a, pg. 5 of PA scoresheets).

***Potential Sources:** Field reconnaissance, company records, can be in measured from aerial photography, topographic maps, etc. See table 1 in PA guidance for score factor to apply.*

Item 2. Waste Types. Describe as landfill, drums, spill, etc.

***Potential Sources:** Use Table 3-1 from PA guidance.*

Narrative:

Source(s) Used:

Item 3. Probable Substances of Concern. List specific chemicals that are suspected to be at the site or that have been shown to exist at the site from this PA or from a previous sampling episode. If chemical was detected in a sampling study, describe the circumstances of the sampling (i.e. date, why sampling performed, media sampled, number of samples, and concentrations)

Potential Sources: EPA, State DEQ, Company records, SC toxicologist, contractor.

Narrative: ____________________

Source(s) Used: ____________________

III. CLIMATE

Item 1. The mean monthly precipitation for each month of the year and the yearly total mean precipitation. If any of the climatic data specific to the site area is not available, use data from the nearest NOAA weather station in a similar geographic setting.

Item 2. The mean monthly temperature for each month of the year. If available, determine soil temperature also.

Potential Source(s): BLM planning documents, NOAA, climatic Atlas.

Narrative: ____________________

Source(s) used: ____________________

IV. GROUNDWATER USE

Item 1. A listing and map showing all drinking water wells and the estimated population utilizing the wells within a 4 mile radius of the site, by HRS target sectors, (i.e., 0 to 1/4 mi., 1/4 to 1/2 mi., 1/2 to 1 mi., 1 to 2 mi., 2 to 3 mi., and 3 to 4 mi.). **Primary vs. secondary targets must be identified.** Primary targets are those wells that you suspect have been exposed to a hazardous substance released from the site. In other words, a high likelihood exists that a hazardous substance has migrated to the well. If you do not suspect a release, then you don't have any primary targets. The population served by municipal wells is available from local authorities. House counts in the area of private wells (either by a "windshield examination" or from local government sources) gives an estimate of population served by private wells. Multiply the house count by the avg. number of individuals per household - data from local authorities or from census data. The exact population served by these water sources is not important; what is required is an accurate estimate which is used for scoring primary targets and secondary targets using population ranges in tables.

Potential Sources: Municipal Water Department, State Engineers Office, US Census Data, City/County Planning Department, USGS (note: use table 2 in EPA's PA score sheets. If area is a karst geological setting, use table 2b).

Narrative:

Source(s) Used:

Item 2. The distance to the nearest drinking water well. The distance determination needs to be made within the following level of detail: 0 to 1/4, 1/4 to 1/2; 1/2 to 1; 1 to 2; 2 to 3; and 3 to 4 miles. This figure is used in table 2 of the PA score sheets.

Potential Sources: Measure on map or pace from boundary of site during field reconnaissance.

Narrative: ____

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V. HYDROGEOLOGY

Item 1. Information on local geology and soils (describe stratigraphy, structural geology, soil depth and character).

Item 2. Information on all aquifers present within a 4 mile radius of the site. State whether or not a karst aquifer is present under the site. Note: for this item, describe the aquifer's thickness, depth, lithology, interaction with other aquifers (if any), and hydraulic characteristics such as permeability or fracture flow. The depth to aquifer is defined as the vertical distance between the deepest point at which hazardous substances are suspected and the top of the shallowest aquifer that supplies drinking water.

Potential Sources: USGS Reports (bulletins, water supply papers, professional paper, geologic quadrangle maps and misc. field studies). State Geologic Surveys, BLM geologists, well drilling records, university of college. BLM soil scientist or soil conservation service soil survey. Service Center hydrogeologist.

Narrative: ____

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Source(s) Used: ____

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Item 3. Hydraulic conductivity information below and near the site. Note: this information is needed for the zone between the bottom of the site (if a landfill) and the top of the aquifer or the ground surface and the top of the aquifer, whichever case applies. Of special interest is the occurence of impermeable confining layers which lie above an aquifer.

Potential Sources: USGS Reports (bulletins, water supply papers, professional paper, geologic quadrangle maps and misc. field studies). State Geologic Surveys, BLM geologists, well drilling records, university of college. BLM soil scientist or soil conservation service soil survey. Service Center hydrogeologist.

Narrative:

Source(s) Used:

Item 4. Determine if any lands in the target area are within designated Wellhead Protection Areas (these are designated by State authorities). If so, describe by name, extent, relationship to this site, and any significant hydrogeologic information from the State Wellhead Protection Determination Report.

Potential Sources: U.S. EPA, State environmental agencies.

Narrative:

Source(s) Used:

Item 5. **Determine the hydrologic soil group common to the site area. Include information on soil physical characteristics and soil permeability if it is available.**

Potential Sources: BLM soil scientist/hydrologist, USDA soil surveys.

Narrative: ______________________________

Source(s) Used: ______________________________

VI. SURFACE WATER

Item 1. **Information on local surface water. Provide a listing of and delineate on a map all of the streams, rivers, lakes, canals, drainage ditches and springs along the 15 mile downstream in-water segment. Note any streams that are within two miles of the site.**

Potential Sources: USGS topo maps, aerial photographs, site reconnaissance.

Narrative: ______________________________

Source(s) Used: ______________________________

Item 2. Identify and delineate on a map all drainage areas in which the site is located and any drainage pathways into and out of the site (include canals and ditches).

Potential Sources: USGS topographic maps.

Narrative:

Item 3. Determine the flood frequency for the site (required: whether site is within annual floodplain, 10-year floodplain, 100-year floodplain, or 500-year floodplain).

Potential Sources: FEMA Maps; USGS Gauging Stations; Calculate using Return Flow Internal Analysis and flood routing analysis. USGS and some State Highway Departments have developed equations to estimate return flow intervals and flood depth for intermittent and small perennial drainage. Service Center hydrologist.

Narrative:

Sources Used:

Item 4. Identify any measures to prevent inundation of the site during a flood or to contain runoff (i.e. run-on/run-off control structures).

Potential Sources: BLM records, site reconnaissance.

Narrative:

Item 5. **Identify the surface water types along the flow route and determine the mean flow rates (Use dilution weight factors in table 4 in PA guidance to arrive at score in PA worksheet).**

Potential Sources: ***District or RA hydrologist, Service Center, USGS. (See PA Table 4.***

Narrative:____

Item 6. **Determine the population served by drinking water drawn from intakes in the surface water flow path along the 15 mile target distance.**

Potential sources: City/county water departments, census data, local government agencies.

Item 7. **Identify all fisheries, recreational areas, wetlands and sensitive environments along the 15 mile target distance.**

Potential sources: District/Resource Area files, District/RA resource specialists, U.S Fish & Wildlife Service, State Fish & Game agencies.

VII. SOIL EXPOSURE CHARACTERISTICS

Item 1. **Identify the resident population 1) at the site and 2) within 200 ft. of the contaminated area. This population includes residents, school pupils or staff, day care attenders or workers on site.**

Potential sources: Local government agencies, site reconnassance, interviews with local residents.

Narrative: ____

Sources used:____

Item 2. Identify any terrestrial sensitive environments in the area of suspected contamination. Describe the distance to the sensitive environment and the relationship to the site (i.e. whether upgradient, downgradient of water sources near the site). Examples are: designated Federal Wilderness Area, National Monument, etc. (see table 7 in EPA PA score sheets).

Potential sources: BLM State\District\Resource Area files, State fish & Game agency, U.S. Fish & Wildlife Service, State Dept. of Environment.

Narrative: ______________________________

Sources Used: ______________________________

VIII. AIR

Item 1. The population within the following radii:

a. Nearest individual (ft.)
b. 0 to 1/4 mile
c. 1/4 to 1/2 mile
d. 1/2 to 1 mile
e. 1 to 2 miles
f. 2 to 3 miles
g. 3 to 4 miles

These populations include the number of people regularly in the area for extended periods of time (residence, students, and workers) within the distance radii from the site.

Potential Sources: Site reconnaissance; local officials; US Census data.

Narrative: ______________________

Source(s) Used: ______________________

Item 2. Presence and type of sensitive environments within a 1/2 mile radius of site. Note: see PA table 5 for types of sensitive environments. This item uses the same table for sensitive environments as the surface water pathway.

Potential Sources: District/Resource Area files, State Office Bilogical Science staffs, District/RA resource specialists, U.S Fish & Wildlife Service, State Fish & Game agencies.

Narrative: ______________________

Item 3. Acreage of wetlands within 1/2 mile radius of site. PA table 9 lists range factors to use for this item.

Potential Sources: Local officials, BLM specialists.

Narrative: ______________________

Source(s) Used: ______________________

APPENDIX 12

GENERIC PUBLIC AFFAIRS PLAN

IN REPLY REFER TO
1703 (130/509)

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

February 24, 1987

Information Bulletin No. 87-133

To: All State Directors

From: Director

Subject: Hazardous Materials Public Affairs/Community Relations Guide

The attached plan was developed by the Washington Office Public Affairs and Hazardous Materials staffs, as a communications guide for dealing with hazardous materials in R&PP landfills or other incidents of hazardous or toxic materials on the public lands that might pose significant health and safety risks to the public.

The plan is intended to help assure that the Bureau meets its obligation to promptly notify appropriate Federal, State and local officials, and the general public to significant hazards that pose an imminent threat. Adherence to this plan will help reduce or control serious health hazards, fulfill Federal and State reporting requirements, and minimize the Bureau's potential financial liability.

While it does not contain the level of detail necessary to meet every conceivable situation, the plan will provide a framework for crafting local public affairs/community relations strategies tailored to local needs.

It is anticipated that the plan will be reviewed at least annually, and changed or modified as necessary. Please review this document, and submit any comments or recommendations you may have for its revision or improvement to WO-130, Room 5600, Main Interior Building or WO-509, Room 3061, Main Interior Building.

David C. O'Neal
Deputy Director

1 Attachment
1 - Public Affairs/Community Relations Reference Guide
Hazardous Waste Incidents on Public Lands (5 pp)

PUBLIC AFFAIRS/COMMUNITY RELATIONS REFERENCE GUIDE HAZARDOUS WASTE INCIDENTS ON PUBLIC LANDS

U. S. Department of the Interior
BUREAU OF LAND MANAGEMENT

January 30, 1987

PUBLIC AFFAIRS/COMMUNITY RELATIONS REFERENCE GUIDE
HAZARDOUS WASTE INCIDENTS ON PUBLIC LANDS

OBJECTIVE

This plan provides guidance to BLM Public Affairs Officers on public affairs and community relations activities to be followed in dealing with the discovery, remedy, removal and enforcement activities related to hazardous materials on the public lands.

BACKGROUND

Although instructions detailing the reporting requirements for serious incidents, unusual events and emergency conditions already exist with the Bureau (Instruction Memorandum No. 86-240, guidance on oil field operations, etc.), the potential threat to human life and health resulting from the hazardous materials may create a uniquely serious crisis situation requiring a specialized response. In addition, EPA regulations and procedures related to reporting and community relations must be followed.

The Bureau has also prescribed a formal reporting system for hazardous materials on the public lands (see Instruction Memorandum No. 85-62). This plan represents an extension of that reporting system, and formalizes the requirement for preparation of public affairs or community relations plans.

Discovery of a hazardous site may result from actual on-the-ground reconnaissance, from ongoing investigations, or from third-party reports. In all cases, management must respond promptly and properly to such findings in order to initiate appropriate response to protect the public welfare and minimize the Bureau's subsequent liability.

Information on a site discovery must be communicated immediately to the Washington Office. State Offices should send an early alert message to WO Public Affairs, which will bring the information to the immediate attention of the Director and the WO Hazardous Materials Staff.

Accuracy of information is critical. Inaccurate, incomplete or misleading information may result in an inappropriate response — one that could worsen the threat to human life or could adversely affect Bureau credibility. At a minimum, initial reports should include location of the site, a preliminary identification of chemical substance(s) involved (if possible), and nature of threats (i.e., contamination of water source, etc.). WO Hazardous Materials Staff will followup to request clarification or any additional information needed to ensure the accuracy of the report.

The Hazardous Materials Staff (WO 509) is responsible for interpreting the data for management, including an analysis of health threats posed by such chemicals. Once a potential hazard to human health has been determined to exist, the Hazardous Material Staff, Directorate, and appropriate BLM field offices will review and confirm findings and assess the situation — critical, potentially threatening, etc. — and prepare a response to meet the Bureau's obligations under the law and inform and protect people and property.

INITIAL "EARLY ALERT" REPORTING PROCEDURES

The discovery of an imminent hazard to public health and safety due to hazardous materials on the public lands must be reported to the Hazardous Materials Staff (WO 509) and to Public Affairs (WO 130) as soon as possible, but no later than 24 hours after the discovery. Reports must be submitted immediately if injury or substantial property damage is involved.

Examples requiring immediate reporting include (1) injuries or major property damage from hazardous substances, (2) cases where EPA or State officials make a finding of imminent hazard, (3) train wrecks or tank truck accidents resulting in imminent hazards, etc.

Submit an "Early Alert" report of incident to the Washington Office	SD
Simultaneously alert the Directorate and, if warranted, the Assistant Secretary.	WO 130, WO 509
Such reports will trigger the following internal actions:	
Brief the Directorate, including Public and Congressional Affairs, on the situation, institute a dialogue between the Director and the appropriate State Director.	WO 509, 500
Prepare a statement to explain the situation and describe the hazard. This assessment report should be concise, containing only factual information understandable to the lay person.	WO 509, 110, 130, SD
If necessary, brief the Assistant Secretary, who will be responsible for determining which Departmental officials should be notified and how that notification should occur (telephone, personal meeting, etc.)	WO 509, 500, 110, 100
Consult with the State Director to determine which State, Federal and local officials (Governor, Congressional delegation, county officials) will be contacted, and by whom.	WO 110, 100,
Contact EPA	WO 509
Contact Governor and State agencies, if warranted.	WO 100, SD
Contact Congressional delegation, if warranted.	WO 100, 150, SD

Prepare media advisory, based on information from the assessment report. This information must be cleared with technical staff and legal counsel.	WO 130, 110, SD
Designate primary spokesperson in the Washington Office or State Office (Ordinarily, this role will fall to the State Office)	WO 110, SD
Issue hazardous materials media alert, with copy to WO-130, after clearance with Solicitor.	SD
Issue followup bulletins as the situation warrants.	SD

PUBLIC AFFAIRS/COMMUNITY RELATIONS PLANNING

The news media can be a valuable ally in such a situation, one of the rare cases where they will virtually do your bidding (warning people of the hazards, broadcasting precautionary measures, etc.). If misled or given erroneous information, however, they can create untold headaches. The WO Public Affairs office should be consulted; coordination with State officials and the required technical and legal reviews are also essential.

A primary spokesman should be designated to initiate media contact or respond to media inquiries. Key media contacts within the area of interest should be contacted by telephone. In particularly serious situations, an emergency news conference should be convened so that all sources have the same information at the same time. If certain information is unavailable at first contact, that information should be provided through followup phone calls at the earliest opportunity.

Planning involves more than media relations, however. A two-way communication between Federal agencies and communities affected by hazardous substances is essential.

The following strategies are designed to protect the public from harm or injury, minimize unreasonable fears, and enlist public understanding and support.

A. BASIC PUBLIC AFFAIRS PLAN
(For immediate emergencies that can likely be controlled within 45 days)

Timing	Action	Responsible Official
Discovery of imminent hazardous conditions on public lands	Notify WO, State, local and other Federal agencies, per CERCLA requirements and standard Bureau reporting requirements in Instruction Memorandum No. 85-62	SD
After initial analysis completed.	Prepare fact sheet/media advisory in consultation with WO 130, technical staff, Solicitor.	SD
	Alert local media, make statement available, issue news release, if warranted.	
	Alert county, local government officials	SD
	Notify Congressional delegation	WO 100, 130, SD
As additional details are known.	Update fact sheets, issue news release	SD
	Conduct news conference, if warranted.	SD

B. INTERMEDIATE PLAN:
(For imminent hazard or long-term cleanup situations likely to last beyond 45 days)

This is a more extensive endeavor, in concert with the WO Hazardous Materials Staff and Public Affairs, to keep local communities and individuals apprised of progress in resolving problems that might affect them.

The primary objectives of this effort are to protect the public safety, address community concerns, help contain the costs of control measures, and limit any possible liability to the Bureau.

Continue activities as prescribed in the basic plan, but supplement those activities by drafting a more detailed and comprehensive action plan. Such a plan will serve to:

- gather additional baseline information about the community near which the site is located;
- establish a method for exchanges between Federal, State and local governments;
- identify citizen leaders, public concerns, and a site's historical and political history;

- provide technical data useful in planning a response to a site's problems, or useful data in possible civil litigation cases against responsible parties.
- provide insight on community concerns, and ideas on how community leaders would like to be involved in forging solutions.

C. COMPREHENSIVE COMMUNITY RELATIONS PLAN

This is a continuation of Plans A and B, but with more extensive public participation, required in complex situations expected to take years to resolve. It would feature more intensive and organized outreach efforts. The objective would be to give local publics an opportunity to comment on and provide input to decisions about cleanup or mitigation actions, so that Federal officials may take local concerns into consideration in planning those actions. Note: Obtain and study Community Relations in Superfund - A Handbook, published in draft form March 1986, by the U.S. Environmental Protection Agency, as a guide in preparing comprehensive community relations plans. It is also advisable to consult with Solicitor and EPA in the preparation of such a plan.

The plan should be a site-specific, comprehensive and well-thought-out community relations effort, aimed at reaching a consensus, if at all possible, on issues, problems, and proposed solutions.

The comprehensive community relations plan would include at least the following elements:

- Identification of individuals in the State or county government entity that will coordinate community response action plans. Assist State/local officials in their actions to protect human health.
- Small, informal public meetings, to explain ongoing activities, update on possible hazards, describe precautions to be taken, provide timetable for resolving problem, etc.
- Frequent meetings and consultations with local government officials, community leaders, interest groups, etc.
- A systematic program of congressional briefings and updates.
- A continuing program to share information with the general public through the news media.

END

6-17-94